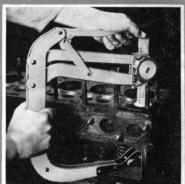




K-D MANUFACTURING CO. LANCASTER, PA. AND HAMILTON, ONT.

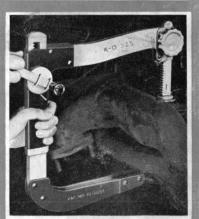


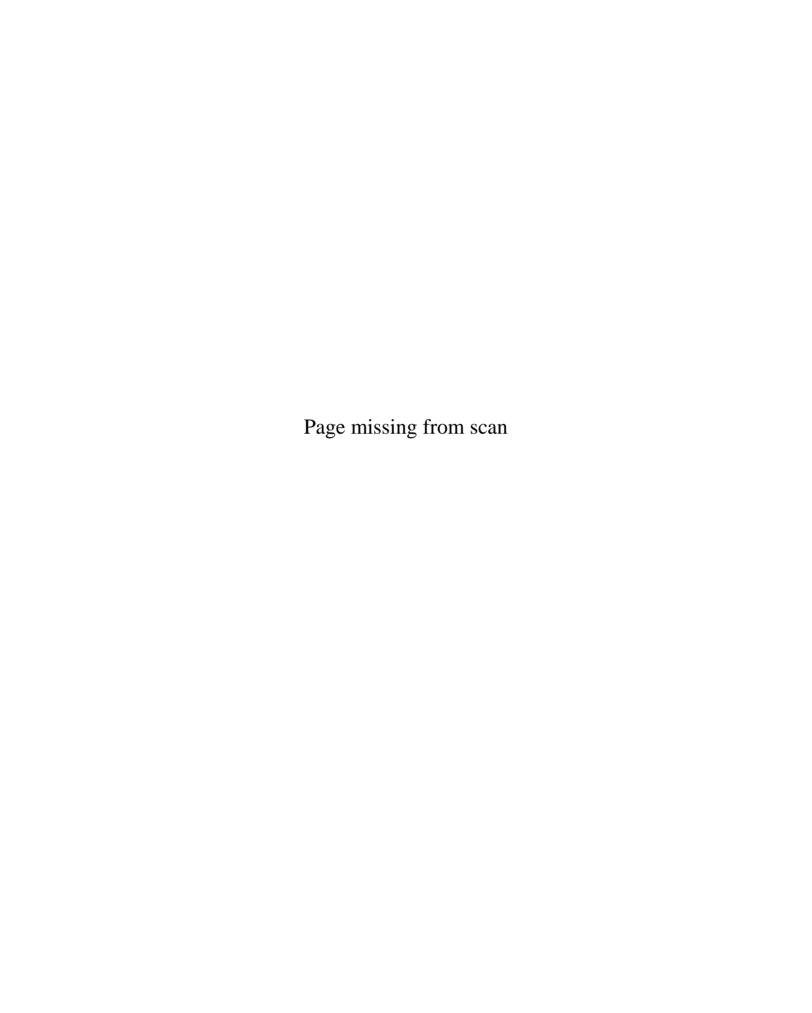












#### VALVE SERVICE TOOLS FOR THE GENERAL SHOP

# K-D 380 VALVE SPRING COMPRESSOR For L- and Valve-in-head motors

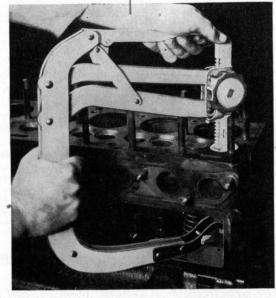
This shop photo shows the K-D 380 in action. Mechanics like its fast, one man operation.

Services more than 85% of the L- and valve-in-head motors on the road. Just about the most universal compressor on the market. Safe and fast for one-man operation.

Strong, fast operating, ideal for the general shop. With throat opening of  $10'' \times 10^1 /\!\!/4''$  this tool will handle most all car, truck and tractor motors. Adaptable to use on larger motors if manifolds are removed. Adjustable jaws and adjustable plunger (see Operation below) make it just about the most universal Compressor on the market today. It is safe and fast for one-man operation.

No. 380 is now equipped with a plunger bar to seat on both flat valve heads and the cup shaped valve heads used on White motors. With earlier types of No. 380 not so equipped, order special plunger bar. (No. 380W below)

Will not service Lincoln V, La Salle or Cadillac motors up to 1949. (See 337 and 339 Compressors, page 8). Ideal for Cadillac and Oldsmobile "Rocket" engines after 1948.

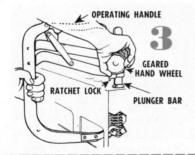


Rigid bar steel construction, strongly braced and riveted. Rustproof cadmium finish. Worn or damaged parts replaceable. (See page 9). Two sets of jaws furnished—No. 32 Offset and No. 35 Straight. Additional jaws also available (See No. 38 below). Net wt.  $8\frac{1}{2}$  lbs.



● M// ● No.35 ●

No. 35 Straight Jaws



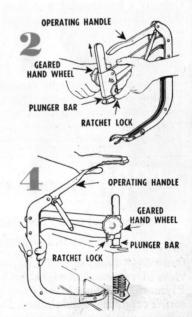
#### OPERATION

First—adjust the jaws to fit the valve spring by turning the wing screw. Jaws or arm may be sprung in compressing the spring if this is not done carefully.

Second—hold the compressor as shown 2, release the Ratchet Lock and turn the Hand Wheel until the Plunger Bar is raised as high as it will go.

Third—Place the Compressor on motor with the Operating Handle down and raise the first spring by turning the Hand Wheel. When the spring is raised the Ratchet Lock will be engaged and the depth adjustment will automatically be set for all the rest of the springs. After the keepers are out and you are ready to proceed to the next spring, raise the Operating Handle to remove the Compressor—do not disturb the Hand Wheel setting.

Fourth—after the first spring, place the Compressor in position shown 4, with Operating Handle up. Push Handle down to raise spring. (In some few motors, where space is restricted and it is impossible to use the Handle, all springs can of course be raised by using the Hand Wheel.)





No. 38 Extra High Offset Jaws, are not furnished as regular equipment, but are available for use on the 380 Compressor on motors with low manifolds.

No. 38W Jaws for White Motors. Use with Nos. 320-380 or 325 Compressors. Same as No. 38 jaws but altered to prevent striking block in back of valves.

No. 380W Adaptor Set for White Motors. For use with 380 Compressor. Includes pair of No. 38 jaws altered to prevent striking block, plus special Plunger Bar to seat on both flat and "cup shaped" valves in White Motors. Plunger Bar easily installed.



380W Set Plunger Bar Screw-type, for over- or under-fender use on deep-set, "hard-to-get-at" valves.

## Ideal for all Chrysler built motors and Ford 6 and Tractor after 1948.

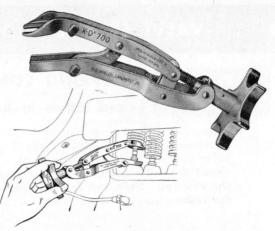
Compact, (only 8" long) the K-D 700 provides plenty of easy lift. Allows ample working space and clear view of all valves. Designed with special attention toward allowing easy replacement of valve locks.

Comfortable, 6 prong, easy turning handwheel actuates a screw which raises and lowers upper jaws, providing automatic locking in any position. Jaws are adjustable by means of thumb screws, and are correctly tempered for long service life. Rustproof cadmium finish. Net wt. 1 lb.

OPERATION

K-D TOOLS

Adjust jaws to fit spring and tappet with thumb screws. By turning handwheel counterclockwise, jaws are brought together so lifter may be positioned. Place cup shaped upper jaw under spring, lower jaws on tappet block. Turn hand-



This drawing made from an actual photograph of the K-D 700 on a rear valve.

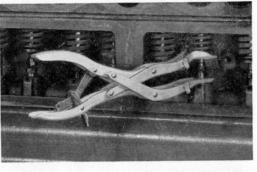
wheel in a clockwise direction raising spring to desired height. Lifter locks automatically at any height, allows free use of both hands after the spring is raised.

## K-D 600 VALVE SPRING LIFTER

#### For practically all L-head motors, old & new.

A strong, dependable lifter for general shop use. 10'' long, its adjustable oil tempered jaws are parallel in action.

Improved ratchet lock release on lower handle for convenience on most motors. Just the right tool for many Automotive, Industrial, and Marine motors where operation in a horizontal position is possible. See illustration. Rustproof cadmium finish. Net wt. 15 oz. Parts, page 9.



Photograph of the K-D 600 Lifter taken right in the shop while in use on a late model motor. This old favorite has pleased thousands of users with its versatility.

#### OPERATION

Adjust jaws to width by turning thumb screws. Release ratchet, and place lifter in position with cup shaped jaws under the spring. Compress handles, rais-



ing spring to height desired. Automatic ratchet lock holds lifter in place, allows free use of both hands. To release, kick ratchet lock forward, allowing spring to descend.

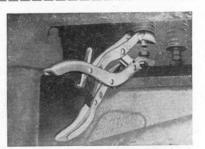
## K-D 900 "Hi-Offset" VALVE SPRING LIFTER

## Scissors-type, for fast under fender operation on most L-heads with manifolds on.

Only 83/4" long, the 900 allows plenty of working space and clear view of valve. Just right for late models Chrysler, DeSoto, Dodge, Plymouth, Oldsmobile (except "Rocket" engines), Packard, Hudson, Teraplane, Studebaker, Dodge truck, etc., with manifolds on! Note ample working space and good clear view of valve in photo and diagram below. Rustproof cadmium finish. Net wt. 1 lb. (Parts, page 9.)



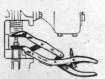
Auxiliary jaws swing into position (illustration at left) for motors having unusual tappet-to-spring clearance such as Chrysler C-7, DeSoto S-1, Dodge truck, and others. Provides total parallel lift of 3". Oil-tempered, adjustable jaws, hardened safety ratchet lock, thumb release.



Shop photograph of K-D 900 Lifter in place on motor, manifolds in place. Note plenty of working space and good, clear view of valve.







For this size split keeper only, as used in most present day models.

Services Cadillac, Chevrolet, Chrysler, Dodge, DeSoto, Plymouth, Ford, Mercury, Ford 6, Big Ford Truck, Lincoln, Hudson, Kaiser-Frazer, Oldsmobile, Packard, also truck and tractor motors using same size keepers.

An easy loading fast operating Inserter specially designed for replacing the one size split keepers now used on most all present day motors. Special spring steel fingers on the jaws hold keepers securely, make loading simple, fast. Self supporting on valve stem, leaving both hands free. Will not drop

keepers if properly loaded and positioned on valve stem. Streamlined, aluminum alloy construction, No. 608 is long enough to reach remote valves on Chrysler motors, thin enough to clear lower spring retainer and tappet on Ford motors. 8" long. Net wt. 2 oz.

Actual size

of keeper



6 tools mounted on attractive easel backed display board. Net wt. 1 lb.

K-D TOOLS

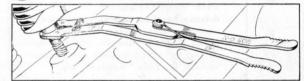
#### OPERATION

THE CORRECT WAY TO LOAD THIS TOOL IS THE EASY WAY.





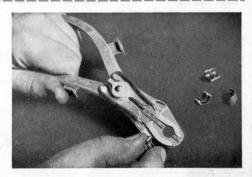
ON THE VALVE STEM. STREAMLINED FOR DEEP REACH.



## K-D 605 VALVE KEEPER INSERTER

For handling split keepers of larger size than serviced with No. 608.\*

An easy loading, fast operating Keeper Inserter that handles nearly all types of split keepers, large or small. Made of light weight sheet steel, it is easy to handle, and supports itself on the valve stem; both hands are free to operate the lifter. Has sturdy, correctly tempered springs. Rustproof cadmium finish. 7" long, net wt., 4 oz.

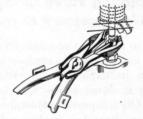


Loading 605 Inserter. Pressure on thumb pad opens jaw to receive keeper.



#### OPERATION

The simplicity of loading is illustrated in the photo above. Pressure on thumb pad opens jaw and strong spring holds keeper when pressure is removed. At the right, the self supporting 605 being placed on the valve stem, keepers in correct position.



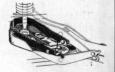
\* 605 will handle split keys with Outside Diameter not less than 7/16"; Inside Diameter (or valve stem diam.) not greater than 3/8".

#### K-D610 VALVE KEEPER RECEIVER

Fits around tappet between jaws of lifter and prevents keepers falling into crankcase when spring is raised.

—high guard walls telescope when handles are compressed, open again when 610 is around tappet. Ideal for use with K-D Lifters. Rustproof cadmium finish. 4" long, net wt., 2 oz.





#### K-D OTO PERCUSSION-TYPE VALVE SPRING REMOVER

A new & faster way to remove springs on Chevrolet, other overhead motors.



### Bounces keepers out as fast as you can move from one spring to the next

Here's the fastest tool on the market today for removing valve springs on Chevrolets and other overhead engines. Not necessary to block valves, just place the head on the bench and go to work. Tool consists of a long machined bar with a counterbored driving head on one end, plus a heavy sliding percussion hammer. It is equipped with a swinging clevis to convert it into a puller for stuck valves. With No. 815 Valve Guide Driver (purchased separately) it becomes a Valve Guide Driving Tool.

Ruggedly constructed of machined steel parts for long dependable service. Rustproof cadmium finish. 203/4" long. Net wt. 5 lb.

810G Driving Head: For larger motors such as International K-8, K-10, K-11 and others with spring retainer  $1\frac{1}{2}$ " diam. or less. Not equipped with clevis for pulling stuck valves. Net wt. 14 oz.



-D TOOLS

#### MULTIPLE USE TOOL

#### BOUNCING' OUT KEEPERS

FIRST: Put clevis in non-operating position as shown.\* Place tool with counterbored



driving head on top of valve spring washer. Lift sliding hammer and bring it down sharply. Shock imparted to spring washer compresses spring, keepers "bounce" out.

#### PULLING STUCK VALVES



FIRST: Swing clevis out into operating position as shown.\* To remove "stuck" valves

turn camshaft until valve is up from its seat. Insert clevis under valve head (stem in clevis slot) and pull valve by striking hammer up against hex nut at top of bar. Safe.



\* Hardened steel (spring temper) clevis binds on driving head, locking in operating or non-operating position. NOT NECESSARY TO LOOSEN SUP-PORTING SCREWS TO CHANGE POSITION.

# K-D815 VALVE GUIDE DRIVER

Use with K-D No. 810 to drive out and replace valve guides in Chevrolet motors. Must be purchased separately.

A solid, stepped-down machined steel bar.  $6\frac{3}{4}$ " long. Pilot 11/32" diam. Net wt. 11 oz.



Insert No. 815 Driver into driving head of No. 810 as shown.\* Insert end of driver

into guide and drive guide down, out of block. The stepped down Driver rests against top sides of the guide. Force is transmitted against top of guide.

OPERATION

\* It is recommended that clevis be removed for this operation to avoid damage.



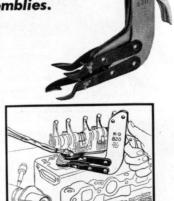
#### K-DOON VALVE SPRING COMPRESSOR

Not necessary to remove rocker arm assemblies.

Designed especially to replace the angled valve springs in Chevrolet engines, this tool can be used to replace springs in most all overhead engines within its capacity. Moving operating handle up opens jaws; moving it down closes and lock jaws, keeps spring safely compressed. Oil tempered adjustable jaws, heavy bar steel frame. Safe, one man operation, makes a difficult job easy. Rust-proof cadmium finish. Net wt. 2 lb.

#### **OPERATION**

This actual shop illustration shows the 820 replacing one of the valve springs in a Chevrolet motor. The compressed spring is placed on the valve. Install keepers. Opening the jaws of the compressor allows spring to expand, engaging keepers in correct position on valve stem. Proceed to next spring.



#### For the BIG Truck, Bus & Tractor engines

One man can operate this rugged deep-throated Compressor on most engines with manifolds in place! L- or Valve-in-heads. Lifetime construction. 3 pairs adjustable, oil tempered jaws.

EASY TO OPERATE! Conveniently located Operating Handle eliminates stretching and pulling. Beneath it is unique brake which may be preset to lock automatically at any point where lifting stops.

VERSATILE! The Plunger Bar adjusting feature together with the selection of jaws pro-

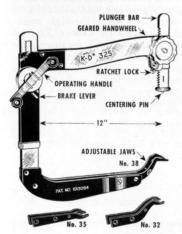


Two views, raising a valve spring on a popular make truck engine.



vides the flexibility to service valves of any length, from the shortest to the longest, in any position.

SAFE! Internal pinion and rack construction prevents pinched fingers; provides power to spare, assures long life. Packed with 3 sets of jaws: No. 35 Straight; No. 32 Offset; No. 38 Extra Hi Offset, plus complete instructions. Net wt., 9½ lbs.



#### OPERATION

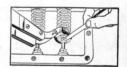
- 1. Adjust jaws to fit spring diameter.
- 2. Set Plunger Bar to its full height.
- Automatic Brake may be pre-set by pushing Brake Lever toward jaws.
- Position Compressor with Plunger Bar on valve head. Jaws under retainer.
- Raise spring to desired height by turning Operating Handle.
- 6. Remove keepers.
- Unlock brake (be sure of this), lower spring and proceed.

THE PLUNGER BAR

When the lift is not within the travel of the gear and rack mechanism, additional lift can be gained by lowering the Plunger Bar. This feature also provides extra versatility to maneuver the Compressor around obstructions.

SPECIAL FEATURE

In certain engines the lower spring retainer extends below end of valve stem (Autocar). With 325, valve is held down and retainer can be raised enough to clear end of stem for checking valve-to-tappet clearance with feeler gage. This can be done before or after keepers are in.





K-D No. 38W Jaws for White Motors. Same as No. 38 jaws, but altered to prevent striking block back of valves. Use with Nos. 320, 380, or 325 Compressors.

# K-D320 VALVE SPRING COMPRESSOR For many large truck, bus motors & tractors

Will not service Cadillac, LaSalle or Lincoln-Zephyr. To service Cadillac, see K-D 337 set or 339, page 8; Lincoln-Zephyr see page 10.

With inside clearance 11" x 14", the 320 is big enough, sturdy enough to service many truck and bus motors, also some tractor motors. Automatic ratchet lock engages in 8 positions, allows free use of both hands when spring is raised. Spring compressing attachment for all sizes of springs. Heavy bar steel, rigidly reinforced. One pair No. 35 Straight Jaws and one pair No. 32 Offset Jaws furnished. No. 38 Extra High Offset Jaws (above) can be used but are not furnished. Net wt. 10 lbs. 6 oz. Worn or damaged parts replaceable. See page 9.



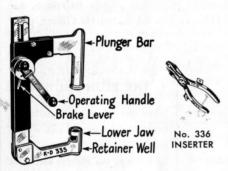
## K-D337 CADILLAC COMPRESSOR SET

For all Cadillac and LaSalle V8's from 1936 to 1949. On new overhead types use K-D 380 Compressor. (See Page 3)

The set comprises the No. 335 Valve Spring Compressor and the No. 336 Valve Keeper Inserter. With the Set one mechanic can remove and replace all valves without walking from side to side for each valve. All left bank valves are removed while standing on the right side and vice versa. It is sturdily constructed of heavy stampings and cast steel and will last a lifetime in normal use. Unique brake provides instant, positive locking at height desired. Set packed in sturdy carton. Net wt. 8 lbs., 9 oz.



#### OPERATION



No. 335 COMPRESSOR

K-D TOOLS

1. Remove all valve lifter as-

2. Place Compressor on valve with *Plunger Bar* on valve head (centering pin automatically centers it on valve head) and *Lower Jaw* under valve spring washer.

3. Turn Operating Handle clockwise to raise spring. Lock the Operating Handle by pushing Brake Lever towards jaws when spring is at desired height.

4. Remove valve retainers, allowing them to fall into the Retainer Well provided in lower jaw. To remove retainers from well, swing hinged cover to either side catching retainers with other hand as they fall through.

To Replace Retainers . . . Place Retainers one in each springtensioned holding jaw on the No. 336 Inserter. (Thumb pads actuate holding jaws.) Open jaws of Inserter and enter through opening provided in Lower Jaw of Compressor so that retainers are in position on valve stem.

Operation of Brake—Brake is locked when lever is forward toward jaws. Always unlock brake to remove from valve or when operating in preparation for use. Brake may be in locked position if desired before raising a spring and will hold automatically when spring is raised.

# K-D339 CADILLAC VALVE SPRING LIFTER For occasional service on all Cadillac & LaSalle V8's from 1936 to 1949. Low priced.

Valve spring retainers removed and replaced with safety and without walking from side to side for each valve. All right bank valves removed while standing on left side, and vice versa. Sturdy, all-steel construction with positive ratchet wrench action. Will give a lifetime of service with normal handling care. Net wt. 3/4 lb. Rustproof cadmium finish.

# PAD RESTS ON HEEL OF CAM

#### OPERATION

1. After removing the hydraulic valve lifter assemblies turn the camshaft until heel of cam is up on top.

2. Place the curved pad of Lifter on heel of cam. With ratchet set to raise, work handle back and forth until jaw fits under valve spring washer. Be sure washer is seated in the depression on the top of Lifter jaw.

- 3. Raise spring to desired height and remove retainers. Note that Lifter stops and locks automatically at any desired height.
- 4. To lower spring reverse the ratchet action. Repeat the above operations when ready to replace valve springs.
- 5. Use K-D 336, 605 or 608 to replace keys.

## K-D 385 VALVE SPRING COMPRESSOR

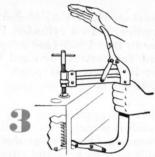
For small valve-in-heads or L-heads.

#### Also small British Motors.

Services all models of Chevrolet. Adaptable to other overhead motors including Buick, Wisconsin Motors (Models VE4, VF4, AB, and AK single cylinder) and other industrials. Services small L-head motors if manifolds are removed. Heavy bar steel, with oil-tempered, adjustable jaws. Plunger adjustable by screw for different lengths springs. Safety over-center lock permits free use of both hands when spring is raised. Inside clearance  $4\sqrt[3]{4}$  x  $6\sqrt[4]{4}$ . Net wt., 2 lbs., 12 oz. Rustproof cadmium finish.

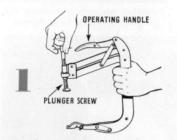
Raising a spring on a late Buick motor with the K-D 385 Compressor.





Remove the Compressor from the first spring by raising the OPER-ATING HANDLE. Proceed to the rest of the springs, using the OPERATING HANDLE only. (On motors where space may not permit the swing of the OPERATING HANDLE, use the PLUNGER SCREW to raise and lower spring.)





Adjust the jaws to the diameter of the spring to be raised. Raise PLUNGER SCREW to its full height.

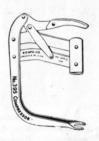


With the OPERATING HANDLE down, raise the first spring by turning the PLUNGER SCREW down. This automatically sets the depth of the PLUNGER SCREW for the remaining springs.

# K-D395 VALVE SPRING COMPRESSOR For British 8 h.p. Ford, Morris Minor

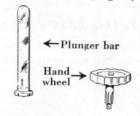
No. 395 COMPRESSOR to fit British Ford 8 h.p. and Morris Minor Motors. Heavy gage steel. Automatic over-center lock. Net wt., 1 lb., 6 oz.

No. 397 COMPRESSOR to fit British Austin 7 h.p. motor. Net wt., 1 lb., 7 oz.



#### K-D REPLACEMENT PARTS For Nos. 380, 600, 900, 320

No. 380 COMPRESSOR (Page 3)

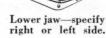


← Ratchet lock

No. 380W Plunger Bar Adaptor for White Motors —see Page 3. No. 600 LIFTER (Page 4)



Upper jaw-specify right or left side.



Ratchet lock.

When ordering please specify the part name and tool number.

Genuine parts for the K-D Tools indicated.

No. 900 Hi-Offset LIFTER (Page 4)



Upper jaws—specify right or left side. No. 320 Compressor (Page 7)



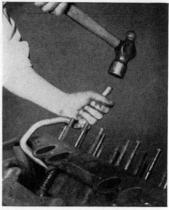
Page 9

For removing guides on ALL Fordbuilt motors from 1934 to 1950 except 60 h.p.; 150 h.p. Lincoln & Big Ford Truck ('49-'50); 6 cyl. after '48.

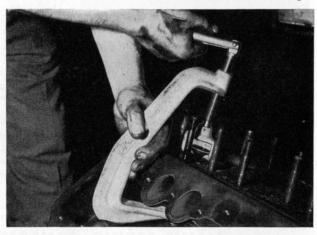
Services Ford V-8, Mercury, Lincoln-Zephyr, Ford 4 cylinder, Ford 6 cylinder to late 1948 (see adaptor below), and Tractor. (For Ford V-8-60 H.P., see 860 Set, next page. To service 1949-50 models see pages 12 & 13).

This set applies the only correct mechanical principle to the difficult job of removing "Frozen" guides from Fordbuilt motors, 1934 and later. Gets right over the point of resistance and pulls straight up . . . removing assemblies without damage or delay, no matter how tightly they are stuck! Correctly designed and strongly made of drop-forged and tool steel. Quick and easy to operate-often pays for itself on first job. Valve Service Manual showing procedure, tolerances, clearances furnished FREE with each set. 920 Set net wt., 7 lb., 6 oz.; 917 Driver 1 lb., 6 oz.; 918 Puller 6 lb.

Set consists of one 917 Valve Retainer Driver, one 918 Valve Guide Puller. one set of 16, No. 922 Valve Guide Retainers, plus latest edition of K-D Valve Service Manual. Steel jaw plate on Puller replaceable.



Removing retainers by hooking 917 Driver in retainer hole, driving



When 918 Puller handle is turned—assemblies are pulled straight up, out, no matter how tightly stuck.

#### OPERATION

No. 917 Driver

Place 917 Driver with hook end engaged in retainer hole (see photo top of page). Allow spring retainer (lower one) to remain in place. Strike handle of Driver squarely and firmly, but not too hard. Continue driving until retainer is removed. The retainer rests in a counterbore in block, and must be "forged" out slowly. If guides are stuck tight, damage to guides may result if first few hammer blows are too hard. (There is a vent hole through LINCOLN-ZEPHYR retainers, and to avoid tearing, these retainers must be handled with even more care than those in other Ford motors.)

While this method will probably damage retainers, the time saved will more than pay the small cost of new retainers. (See No. 921, 922 below.)

After retainers are removed, place Puller in position shown in lower photo-the hardened steel jaw plate between spring coils under guides, the pressure cup on block casting around valve head. When screw handle is turned, jaw plate bears on bottom of guides and assembly is pulled straight up and out, no matter how tight. Cup has sufficient internal clearance to allow valve head to rise inside as assembly comes up. Set works fast, easy—usually removes ALL valves in less than 30 minutes. Hardened Steel Jaw Plate can be replaced if damaged or broken. Shipped with rivets, easy to install. See price list.



#### Adaptor for 920 Set to service Ford 6 cyl. (to late '48)

In Ford 6 cyl. motors the intake valves are larger than the exhaust and will not rise inside the cup of the 918 Puller. The No. 923 Adaptor is made for these valves and must be used on the Puller to service Ford 6 cyl. motors. Adaptor is not included with the 920 Set. Must be ordered separately. Net weight 5 oz.

bent beyond salvaging. The time saved in this operation more than pays the small cost of new retainers. No. 922 Retainer fits Ford V-8, Mercury, Ford 4 and 6 cyl., Ford Tractor. No. 921 fits Lincoln Zephyr. No. 922 available in bulk, plated or unplated, 3000 up.



No. 918 Puller















REPLACEMENT VALVE GUIDE RETAINERS

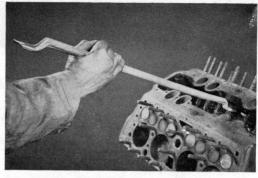
In removing retainers with 917 Valve Guide Driver, they are "forged out" and

# K-D 245 BAR TYPE VALVE SPRING LIFTER

# For replacing assemblies in Ford V8 and Mercury motors

An ideal companion tool to 920 Set for replacing retainers. Not for removing! Forged from chrome vanadium steel, correctly designed, properly tempered. 30" long with identical jaws at each end. Rust-proof cadmium finish. Valve Service Manual furnished. Net wt. 3 lbs., 8 oz.

NOT to be used for prying out 'frozen' valve guides. Guarantee voided if used in this manner.



K-D 245 in place on a Ford V-8 motor. Raisin handle pulls guide down for installing retainer.



#### OPERATION

Replace serviced assembly in guide bore with the split between the guides running crosswise in motor, so that each half of the guides is gripped by the jaw of the bar lifter. Insert the jaw of the 245 between the coils of the valve spring, engaging the shoulder cast on the bottom of the guides. Raising up on the handle of the lifter pulls the guide down... permitting installation of the valve guide retainer. It's fast and easy.

K-D260 BAR TYPE VALVE SPRING LIFTER For replacing assemblies Ford V-8-60



Strong channel steel, hardened, but not to be used on "Frozen" guides. Especially recommended for use with K-D 860 Set (see Operation of 860 Set, below), but not in place of it. Rustproof, cadmium finish. Net wt., 1 lb., 1 oz.

## K-D 25 VALVE ASSEMBLY REPLACING TOOL For Fords where there is no "heel" to rest bar lifter.

The K-D 925 designed for Lincoln-Zephyr, Ford 4, Ford 6, and Tractor to '48... but not Ford V-8-60, will also replace assemblies in Ford V-8 & Mercury to date (except 150 h.p. Trucks '49-50). Primarily for use where there is no "heel" to rest a bar lifter. It is a strong dependable tool of channel and tool steel construction. Positively must not be used in an attempt to remove "frozen" guides! Rustproof cadmium finish. 21" overall length, net wt. 3 lbs.

#### OPERATION

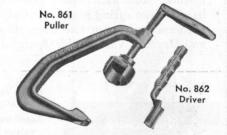
The link on the end of the tool is hooked on one of the head studs as shown in the photo right. The jaw is inserted between coils of spring and engaged on guide flange. Downward pressure on the handle pulls assembly down, permitting installation of guide retainer. The handle of the 925 is short enough to service Ford 4 and 6 cylinder motors and also has rod extension for extra leverage on stiff springs.

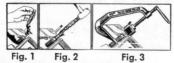


K-D 925 hooks on head stud, downward pressure on handle does it!

# K-D 860 VALVE GUIDE PULLER SET For removing guides Ford V-8-60 only.

This Set is the same in mechanical principles as the 920 on page 10, but smaller to fit the 60 H.P. Ford V-8. Consists of one 861 Valve Guide Puller, one 862 Valve Guide Driver, and latest edition K-D Valve Service Manual. 860 Set, net wt., 4 lbs., 14 oz.; 861 Puller, 4 lbs., 3 oz.; 862 Driver, 11 oz.





**OPERATION** 

Fig. 1 shows valve and spring being raised with 260 Valve Lifter (above) without removing the lower valve spring retainer... and insertion of Driver. Fig. 2 shows Driver in position, self supported under valve head with guides driven down far enough to remove guide retainer. With K-D 260 Bar Lifter raise valve and

spring without removing lower spring retainer. Insert Driver under valve head. Again raise valve with Lifter, insert Driver (Fig. 1). Fig. 2 shows Driver in position, self supported under valve head. Strike handle with hammer, driving guide down far enough to remove retainer. Fig. 3 shows Puller in position to pull assembly . . . hardened steel jaw between coils of spring under guides . . . pressure cup resting on block casting around valve head. Turn down screw handle . . . assembly is pulled straight up—no damage or delay. Pressure cup has sufficient internal clearance to allow valve head to rise inside as assembly is pulled. Hardened steel Jaw plate replaceable if damaged or broken. Shipped with rivets. Easy to install. See price list.

# K-D935 VALVE SPRING COMPRESSOR

A necessary tool for removing valve springs on 1949-50 Lincoln & 150 h.p. Ford Truck (Models F7, F8). Must be used with K-D 930 Compressor below!

Due to small clearance, the K-D 935 Compressor must be used to remove valve springs from the motor before other work can be done on valves and hydraulic lifters. With the K-D 935 you can slide springs out, and in again, making this difficult job easy. Safe, one-man operation. Oil tempered jaws, heavy bar steel frame. Moving operating handle down compresses spring, locks jaws. Latest edition K-D Valve Service Manual furnished. Net wt., 2 lb.



## K-D 930 VALVE SPRING COMPRESSOR

- For use with K-D No. 935 Compressor to raise valve springs & remove keepers on 1949-50 Lincoln & 150 h.p. Ford Truck (Models F-7, F-8).
- For dissassembling & assembling 1949-50 Ford & Mercury V-8 valve assemblies.
- Also for servicing individual valves on 1949-50 Ford & Mercury V-8 motors, without removing guides.

This tool is built with all the time proven characteristics of K-D Tools. It is sturdily constructed, easy to use, one-man operated. Heavy bar steel frame with oil tempered, adjustable jaws. Plunger adjustable by plainly marked screw for different horsepower motors. Automatic, safety over-center lock permits full use of both hands when spring is raised. Grip block on back of frame used to hold compressor in vise when disassembling and assembling Ford and Mercury Valve Guide Assemblies. Net wt., 2 lbs., 8 oz.



OPERATING
INSTRUCTIONS
NEXT PAGE

Necessary COMPANION TOOLS for 1949~50 Fords

(-D TOOLS

608 Valve Keeper Inserter—for replacing valve keepers on 1949-50 Ford built motors. See page 5.

609 Valve Keeper Inserter—for installing valve keepers on rotating, free type valves in F7, F8 trucks, also 6 cyl. 8MTH engines. See page 14.

617 Piston Pin Inserter for 1949-50 Ford & Mercury V-8s. See page 16.

1120 Valve Grinding Bushing for taking place of guides when grinding valves on 1949-50 Ford V8 & Mercury. See page 15.

700 Valve Spring Lifter-for servicing Ford 6 and Tractor since 1948. See page 4.

920 Valve Guide Puller Set-for nearly all Fords 1932-50. See page 10.

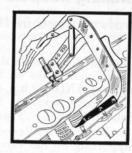
245 Bar Type Spring Lifter for replacing valve guide assemblies. See page 11.

## Servicing 1949-50 Lincoln, F-7, F-8 Trucks IN TWO EASY STEPS





1. Adjust jaws with wing screw to fit valve spring. Next — adjust plunger screw to line marked 150 h.p. Compressor now ready for use.



2. Raise operating handle. Place compressor on motor. Pushing operating handle down raises spring. After keepers are removed, raise operating handle to remove compressor. Proceed to next spring. Do not disturb plunger bar setting.







Reverse operation to replace springs.



K-D 10015

1. Place upper jaw in position between cylinder casting and upper valve spring retainer; lower jaws beneath lower valve spring retainer. Compress spring by moving operating handle down until it locks in position. 2. Hold compressed spring up against cylinder casting. Before valve is removed be sure that tappet is not stuck in the lower spring retainer. Remove valve. 3. Valve removed, slide spring down, cocking lower end toward you until inner edge of lower retainer rests on top edge of tappet. Bear down to compress small hydraulic tappet spring, and at same time pull toward you, gently, to slide spring out.

4. Replace spring and valve in motor. Raise spring, install keepers on valve stem with self supporting K-D 608 Inserter. Raise operating handle of compressor, allowing spring to descend into place. K-D 608 services following 150 h.p. motors: all 1949-50 Lincolns; Ford Truck to Engine #8EQ-27993.

#### How to service 1949-50 Ford & Mercury V-8



It is recommended that complete valve assemblies be removed as on former Ford motors with K-D 920 Valve Guide Puller Set. Use the K-D 917 Driver to remove horseshoe retainer; 918 Puller to remove assembly. See Page 10.

After valve assembly is removed from motor, use K-D 930 Compressor (gripped in bench vise) for disassembling and assembling.











- Adjust jaws with wing screw to fit valve spring. Next—adjust plunger screw to line marked 100 h.p. Compressor is now ready for use.
- 2. Raise operating handle. Place compressor on motor. Pushing operating handle down raises spring. After keepers removed, raise operating handle to remove compressor. Proceed to next spring. Do not disturb plunger bar setting.
- 3. Reverse operation to replace spring. Install keepers on valve stem with self supporting K-D No. 608 Inserter. Raise operating handle of compressor, allowing spring to descend into place.

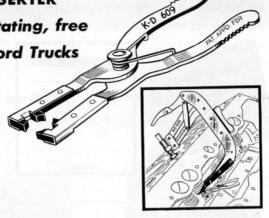
\* To service Ford 6 cyl. since 1948, use K-D 700 Lifter (Page 4); 608 Inserter (Page 5).

For installing keepers on the rotating, free

type valves used in 1949-'50 Ford Trucks

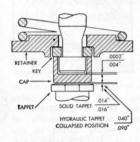
This tool is specially designed to handle the split collar type keepers used in free type valves on Ford 150 h.p. Trucks (8 cyl. 8EQ engines) AND 110 h.p. 6 cyl. (8MTH engines) Ford Trucks. Also services Massey-Harris "Pony" and Allis Chalmers Model G Tractors.

Only 41/2" long, keepers are quickly aligned on the small jaw magnets. Self supporting on the valve stem. This tool is also very handy for picking out keepers that drop into valley when lifting spring. Net wt.  $1\frac{1}{2}$  oz.



#### SERVICING & INSTALLING FREE TYPE VALVES

#### STEP BY STEP OPERATION



- 1. Remove valve springs with 930, 935 Compressors as explained on page 13.
- 2. Compress and replace spring with 935 Compressor. Install valve, place Cap on end of stem. Let spring down.
- 3. To replace the split collar type keepers on these valves, lift spring with 930 Compressor, install keepers with 609 Inserter. Lower spring and proceed to next valve.
- 4. Check clearance between end of valve stem and *inside* of Cap. (See diagram). If clearance exceeds .004", polish open end of Cap against a piece of fine emery cloth to bring vertical movement of valve within specified clearance. If less than .0002", grind off end of valve stem. It may be necessary to remove the valve assembly several times before arriving at proper clearance. The 609 is the only inserter available to do this job, and will save much time.

#### K-D VACUUM CUP VALVE GRINDERS . . . for hand grinding valves.

For hand grinding flat head, unslotted valves. The synthetic rubber vacuum cups are impervious to oil, grease, gasoline and atmospheric conditions. They are made with thin walls for greater suction in 4 sizes, adaptable to valve heads up to 11/2' diameter. Cups are replaceable.

No. 503 Grinder in use. Notice how cup stays on



No. 503 Grinder for all Ford built motors using valves with head diameter of 1½"—such as Ford models A, B, 4 cyl., V8, and V12. Grinder is equipped with 1¾" diameter cup and metal retaining ring having inside diameter of 1 9/16" to fit over valve head preventing rubber cup slipping off center while grinding. Metal flange keeps hands from sliding down wooden handle. Net wt., 4 oz.

No. 865 Grinder-Same design as 503 having cup diameter of 1 1/16" for Ford V-8-60. Inside diameter of metal retaining ring 1 5/16" for 11/4" diameter valve head. Net wt., 3 oz.



No. 505 Dual Grinder with cups 11/8" and 13/8" can be used on many valve sizes. Synthetic rubber suction cups, but no metal retaining ring like 503 above. Cups replaceable. Net wt., 3 oz.

No. 505BF Grinder, like 505 but with 15/16" and 1 1/16" dia. cups for all types small motors-industrial, etc.





No. 506 Grinder is a popular low-priced tool for Ford-built and many other valves. Synthetic rubber suction cup, 1% dia. Cup replaceable. Net wt., 2 oz.

No. 506 BF Grinder like 506, but with 15/16" diameter cup. For British Ford and many small American motors, including many small industrial motors. Net wt., 2 oz.



No. 504 Adaptor for use with mechanical grinder on Ford and other unslotted valves. Synthetic rubber suction cup and metal retaining ring to keep cup from slipping off center while grinding. Cup diameter  $1\frac{1}{8}$ ". Net wt., 2 oz. No. 507, plain synthetic rubber cup adaptor for use with mechanical grinders.  $1\frac{1}{8}$ " dia., net wt.,  $\frac{1}{2}$ " oz. No. 509 same with 13/8" diameter. Net wt., 1/2 oz.



No. 507 No. 509

When ordering replacement cups, be sure to specify cup diameter.



Rubber Cups only. May be ordered in the following diameters: 15",  $1\frac{1}{16}$ ",  $1\frac{1}{8}$ ",  $1\frac{3}{8}$ ".

#### K-D VALVE GRINDING BUSHINGS

#### For taking place of guides while grinding valves in Ford Motors.

Accurately machined, hinged, one piece bushings, sizes for all Fordbuilt motors. Valve installed as shown in cut. Used when grinding valves, also in place of guides when establishing stem-to-tappet clearance. Jumper spring attached. Nos. 1118, 1160, 511, 1260 for Fords using mushroom-end valves up to 1949. 1949-750 Ford & Mercury use No. 1120 below.



No. 1118, Body diameter 1.029", for Ford V-8, Mercury, Lincoln-Zephyr, Tractor, Ford 4 cyl., and Ford 6 cyl. Net wt., 4 oz.

No. 1160, Body diameter .8505", for Ford V-8-60 h.p. only. Net wt., 3 oz.

No. 511, Body diameter .591", for Ford A and B. Net wt., 3 oz.

No. 1260, Body diameter .8105", for British Ford 8 H. P. Net wt., 3 oz.

#### NEW! No. 1120 for 1949-'50 Ford V-8 & Mercury

No. 1120, for 1949-50 Ford and Mercury V-8's—one piece, solid bushing, valve installed as shown. Jumper spring attached. Body diam. 1.030", net wt., 5 oz.



#### K-D VALVE GUIDE DRIVERS . . . for driving out 'frozen' valve guides

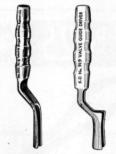
Well made, drop-forged tools, correctly designed to drive "frozen" Ford Valve Guides.

No. 502 Driver is for Ford Models A and B and is long enough to drive guides completely out of the bores. Net wt., 11 oz.

No. 818 Driver is for Ford Models V-8-85, 1932 and 1933 and is long enough to drive guides completely out of the bores. Net wt., 10 oz.

No. 862 Driver is for Ford V-8-60 only and is designed to drive guides down only far enough to permit the removal of the guide retainer. It will not drive guides completely out of the bores. Net wt., 11 oz.

No. 919 Driver is for Ford V-8-85 (early models) and Lincoln-Zephyr. Drives guides down only far enough to permit the removal of the guide retainers. Net wt., 11 oz.



No. 502 No. 818

02 No. 862 18 No. 919

No. 919 cannot be used on late motors because the new type heavy valve springs will not allow valves to rise high enough to allow insertion. Use No. 917, page 10.

No. 815 Driver is for use with K-D 810 to drive out and replace valve guides in Chevrolets. See Page 6.



# K-D 307 VALVE SPRING LIFTER For "A" and "B" Fords only.

The most efficient tool for removing and replacing these valve springs. Parallel jaw action. "Walks" spring right in or out, as shown in illustration. Sturdy. Dependable. Net wt., 12 oz.

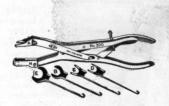




"Walks" springs right in or out.

# K-D 300 VALVE SPRING LIFTER For Servicing L-head motors.

The original K-D Lifter which is still very popular. 11" long, with safety ratchet lock and interchangeable jaws. No. 300 has 6 jaws, as shown and weighs 1 lb., 11 oz. net. When ordering extra jaws, please use correct letters as indicated.



#### PISTON PIN TOOLS . . . for removing & installing wrist pins

Necessary tools for installing and removing wrist pins in Ford and other motors using center split ring pin lock. Tapered end expands split ring in rod, allowing easy insertion of pin. Tools threaded in center for removal after pin is installed. Alloy steel, hardened and ground to accu-



No. 560 Pin Tool, Ford A and B, net wt., 2 lbs. Diameter .997".

No. 617 Pin Tool, for 1949 Ford & Mercury V-8s. Diameter .747". Stud size 9/32". Net wt., 121/2 oz.

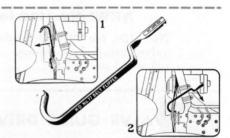
No. 618 Pin Tool, Ford V-8-85, Mercury, Lincoln-Zephyr and all other late models using split ring center lock only. Not for V-8-60. Net wt., 13 oz. Diameter .747". Stud size 7/16"

No. 619 Pin Tool, for Studebaker Champion since 1939. Diameter .747". Stud size 5/16". Net wt., 13 oz.

#### FAN BELT FLIPPER

#### For removing, installing fan belts

For quick, easy removal and installation of V-type fan belts without the necessity of disturbing pulley settings. An especially good tool for Ford A, Ford B, Ford V-8-85, Mercury, and Lincoln-Zephyr. Straight end removes as shown in Illustration No. 1. Hooked end installs (Illus. 2). Carefully formed and milled from half round steel. wt., 7 oz.



#### LAMP BULB PLIERS Removes, installs bulbs



21001 G-)

The right tool for removing and installing all types of lamp bulbs. Jaws milled with sharp teeth and templet fitted to exact diameter of bulb base to insure even, non-slip grip on base of bulb and prevent danger of cracking glass. Tempered. 71/2" long, offset jaws to prevent scratched reflectors. Net wt. 4 oz.

#### LAMP BULB GLOVE Removes, installs bulbs

Pliable rubber cup, ribbed inside, grips glass of bulb and makes removal and installation of lamp bulbs safe and easy. Also ideal for use on amplifying tubes. Small size and low price makes 444 a MOTORISTS' ITEM. Packed only in bulk.

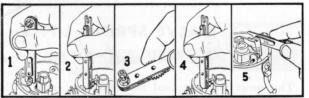


## CONTACT POINT WRENCH

#### For Autolite-type Stationary Points

Removes, installs stationary points on Autolite type distributors. Speedy, sure, dependable. End wrench breaks loose lock nut. Socket on opposite end spins point in or out. Gear driven socket stepped down to hold point securely. Permits fast, easy finger tip starting. Includes clearance gauges from .015" to .030" for checking. Heavy gauge steel construction. 3\%" long-always handy. Fast, easy to use . . . see the 5 simple steps right.





- 1. Break loose lock-nut holding old point. 2. Spin out old point.
- 3. Socket holds point securely—starts easy.5. Measuring clearances from .015 to .040". 4. Spin in new point.



Strong, eye-catching counter display, 11" x 14". Holds 12 tools. Easel back for quick set-up. Chart on back shows all distributors tool services. Net wt., 2 lbs.

Ahrens Fox 38-39, 46-47 American Bantam 38-40 Auburn 35-36 Autocar 37-41 Brockway 32-49 Checker Cab (Taxi) 40-41 Chrysler 35-38 Cord 36-37 Cord 36-37 Crocker Motorcycle 38-40 Crosley 40, 46-49 De Soto 35-38 Diamond T 34-49 Dodge 35-38 Dodge Truck 34-40, 42 Duplex 37-48 Fargo 34-38

Firebaugh (Scooter) 47 Four Wheel Drive 46 Four Wheel Drive 46 Gramm Truck 36-40 Hudson 35-42, 46-47 Hupmobile 35-36, 38-40 Indiana 37-40 Indian Motorcycle 35-48 International 46-47 Kenworth 47 La Fayette 35-36 Lincoln 35-39 Linn 46-48 Mack 48 Mack Jr. 36-38 Moreland 35-39 Nash 35-41, 46-47

Services Autolite distributors used in:

Oshkosh 35-41, 47-49 Oshkosh 35-41, 47-49
Packard 35-40
Paramount Taxi 35
Peter Pirsch 30-42, 46-48
Plymouth 35-38
Plymouth Truck 37-38 Plymouth Truck 37-38 Reo Truck 34-39 Southern Coach 44-46 Sterling 40-48 Studebaker 35-42, 45-46 Studebaker Truck 36-42, 45-47 Terraplane 35-38 Ward LaFrance 45-48 White 37-41 Willys 33-35, 39-42, 45-49 Willys Truck 40-41, 45-49

For aligning contact points right in the distributor.



This universal tool is the result of long and careful study of ignition experts and is carefully forged and machined to handle all kinds of points in all types of distributors, including Ford. Figs. 1, 2, 3 show each of the three arms of the tool in use on the type point it is made to service.

No. 115 is carefully machined and correctly tempered for complete satisfaction and long service. Net wt., 5 oz.







S1001 G-X

Fig. 1-Aligning channel type arm Fig. 2-In use on high speed arm Fig. 3—Aligning stationary point

#### **K-D IGNITION KITS**

#### For almost any type Ignition Adjustment

Many ignition ills can be blamed on incorrect point adjustments on voltage regulators and distributors. These K-D kits were created to meet the demand for a complete set of tools to do all types of ignition servicing quickly and accurately. They are the result of long and careful study by ignition experts. Each tool is properly tempered for long service and complete satisfaction.



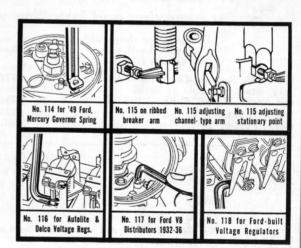
No. 120 KIT



No. 119 KIT

K-D No. 120 Kit contains K-D No. 114 Ford Governor Spring Adjusting Wrench; No. 115 Ignition Point Aligning Tool; No. 116 Autolite & Delco Voltage Regulator Tool; No. 117 Offset Screwdriver for Ford V-8 Ignition Point Clamping Screws; No. 118 Ford Voltage Regulator Tool. With this kit a mechanic can make almost any ignition point adjustment quickly, accurately. Tools packed in handy, pocket size plastic kit. Kit when folded measures  $4\frac{15}{16}$ " wide x  $4\frac{5}{8}$ " high.

K-D No. 119 Kit contains Nos. 114, 116, 117, 118 only. 115 not included. Pocket size plastic kit 31/4" wide x 41/2" high. Net wt., 4 oz.



#### NAILPULLER Pocketsize!

A powerful, convenient tool for general use. For Carpenters, Electricians, Floor Layers, Everyone! A small, extra-leverage hand tool for pulling nails and wire fence staples; small enough to carry in your pocket or toolbox! Strong, durable, pulls up to tenpenny nails easily. 12" long, use it in tight places where ordinary bar pullers are too large



and awkward to manage. Easy to use-see operation, right. Rugged construction with hardened, tool-steel, counteracting jaws. Rust-proof cadmium finish. Net wt., 11 oz. Packed in counter display carton-6 Nailpullers, individually boxed, plus display board. Net wt., 4½ lbs.

#### **OPERATION**

Rest rocker securely on wood surface with puller jaws straddling nail head. Strike top of nail head. Strike top of upright member with hammer until both jaws are driven in wood under nail head. Raise handle until jaws grip nail, then pull.

With nail started, only one hand is necessary to pull it all the way.

For double leverage, engage claw hammer on pin in upright member — pull with both hands.





#### PISTON RING FILER For precision sizing of all types of piston rings.



A portable rotary Filer for sizing any make, any type, and size of piston ring and doing it with machine shop precision. Filer holds to head stud or bolts to work bench. Ring is held against the calibrated gage plate as shown in illustration. When crank is turned, both ends of the ring are filed at the same time. Human error is eliminated and you're sure of a parallel workmanlike job. Six inch continuous cutting stroke. Saw teeth on edges of cutter can be used as rotary hack saw for slotting piston skirts, etc. Cutter milled to maximum sharpness and correctly tempered. Easily replaced. Net wt., 2 lb., 12 oz.



K-D No. 872 CUTTER FILE. For use on 870 above. Select tool steel, correctly tempered for long service. Net wt., 1 oz.



#### PISTON RINGER For removing, installing piston rings up to 4" diameter.

A handy, pocket-size tool which removes and installs all makes, types and sizes of piston rings up to 4'' diameter. Light, but strongly built, with correctly tempered springs. Net wt. 3 oz.

#### OPERATION

To Remove Rings-The Ringer is placed on the ring with the spreaders in the ring opening, as shown right. When the handles are compressed the ring will be expanded and can be removed top or bottom from the piston. Saves rings, fingers.

To Install Rings-The gripping jaws of the Ringer are opened as shown right above and the ring is placed in the jaws, against the pins with the spreader in the opening. When the handles are compressed the ring will be expanded and can be installed. Fast!



Removing ring

Gripping to install

#### WHEEL STUD RIVETING DIE SETS For removing and installing wheel studs.

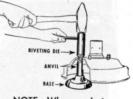
Designed for shops with an average amount of wheel work. Dies and Anvil tempered and Rockwell tested. Complete instructions furnished.

No. S565 Set, for Chevrolet and Pontiac. 7/16" Stud. Consists of 565RD Die, Base and Anvil. Net wt., 7 lbs.

No. S567 Set, for Chevrolet truck 9/16" Stud. Consists of 567RD Die, Base and Anvil. Net wt., 6 lbs. 14 oz.

No. S570 Set, for Ford-built cars, 1/2" Stud. Consists of 570RD Die, Base and Anvil. Net wt., 9 lbs., 6 oz.

No. S575 Set, For Ford AA and BB Truck, Stud. Consists of 575RD Die, Base and Anvil. Net wt., 9 lbs., 14 oz.

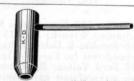


NOTE: When ordering any of this equipment please use the type numbers given to avoid confusion.

# RIVETING DIES

No. 565RD, for 7/16" Stud (Net wt., 2 lbs., 5 oz.) No. 567RD, for 9/16" Stud (Net wt., 2 lbs., 4 oz.) No. 569RD, for \( \frac{5}{8}'' \) Stud (Net wt., 2 lbs., 4 oz.)
No. 570RD, for \( \frac{1}{2}'' \) Stud (Net wt., 2 lbs., 5 oz.)

No. 575RD, for 3/4" Stud (Net wt., 2 lbs., 2 oz.)



Only

No. A 565 for 7/16'' and 9/16'' round head studs (Chevrolet) No. A 570 for  $\frac{1}{2}''$  flat head studs No. A 575 for  $\frac{3}{4}''$  flat head studs

BASES Only

No. B 565 for anvil No. A 565 No. B 570 for anvil No. A 570 No. B 575 for anvil No. A 575

#### DOOR HANDLE SPRING REMOVER

For removing, replacing horseshoe retaining springs on interior door handles

Services Chevrolet, Pontiac, Olds, Buick, Cadillac since 1933. Toothed jaws grasp spring, pull it out. Does job fast without danger of flying springs or marring upholstery. Strong, all steel construction. Tempered jaws. Tool thin enough to reach after spring; strong enough to withstand normal operating pressure on handles. Rustproof, cadmium plated finish. Jaws give maximum "bite" on all types of springs used. 734" long. Net wt., 4 oz.



6 tools mounted on bright, sturdy 2 color counter sales color counter sales display 11" x 14". Easel back for quick set up. Net wt., 2

#### OPERATION

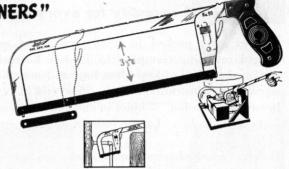
Press back escutcheon plate behind handle until horseshoe retaining spring is visible. Grasp spring firmly in jaws, pull. On tough rusted springs turn spring in its groove to break rust seal and pull at same time.



Spans obstructions & projections on difficult jobs

An all steel saw frame with a quick blade change. Stops provided to fit 3", 4½", 6", 8", 10", 12" blades. One 3", one 12" blade furnished. Saws in places impossible to reach with conventional frames with 3" or 4½" blade installed. Streamlined backbone saws in openings to 3/16". To change blade: release lever on tension bar, install blade, reset lever. Correct tension assured

Backbone and handle integral, providing great strength, rigidity. No loose parts; frame cannot "jackknife." Comfortable pistol grip correctly angled for balance. Net wt., 1 lb., 7 oz.

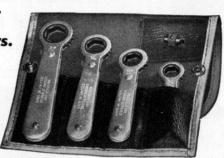


#### **K-D "FLEX-TUNG" HACKSAW BLADES**

The finest quality blades, correctly tempered for dependable long life. One dozen to a package. No. 13—3" blades. No. 14—4½" blades. No. 15—12" blades. No. 16—10" blades. No. 17—6" Jr. blades, ¼" wide, .014" thick, 32 teeth to inch for use in Spring Steel Frames.

# K-D 20 RATCHET WRENCH SET For use in close quarters.

The four most popular hexagonal sizes,  $\frac{3}{8}$ ",  $\frac{7}{16}$ ",  $\frac{1}{2}$ ", and  $\frac{9}{16}$ " openings, put up in a pocket size roll. Double end screwdriver bit to fit  $\frac{3}{8}$ " wrench included. Each wrench is a complete unit, with no heads to change. Ratchet reversible. Screw or nut held in place for "upside down" work as in box-socket. Correctly tempered heads and ratchets. Sizes range from 3" to  $\frac{41}{2}$ " long. Net wt. set, 12 oz.



Popular with Plumbers for use on Chromium and Brass Acorn Nuts. Avoids damage.



A screw being started with finger. Ratchet teeth extend beyond housing for the purpose.



(-D TOOLS

Offset screwdriver bit in one of many applications.

No. 21— $\frac{3}{8}$ ", No. 22— $\frac{7}{16}$ ", No. 23— $\frac{1}{2}$ ", No. 24— $\frac{9}{16}$ ", No. 26 Screwdriver Bit. Order individual wrenches by number.

# K-D 27 OFFSET, RATCHET-BIT SET

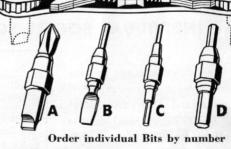
One Bit for Phillips, Reed & Prince screws No. 0 to 12 Five Bits for hex key sizes: 5/64", 3/32", 1/8", 5/32", 3/16"

Two Bits for standard slots 3/16", 5/16" wide

For all types of close, tight work, also for right angle applications where screwdrivers can't reach.

Set consists of K-D No. 27W double end ratchet wrench plus four additional bits, Nos. 27A, 27B, 27C, 27D.

 $\frac{1}{4}$ " hex opening on one end of wrench, 5/16" on other. Reversible ratchet. Bits held in place for "upside down" work as in box-socket. Correctly tempered. Rustproof cadmium plated finish.  $3\frac{7}{8}$ " long. Complete set packed in plastic case, below. Net wt., 4 oz. Bits accurately forged, correctly tempered,  $1\frac{1}{2}$ " long.



Fits all 4 types

No. 27A Bit: one end for Phillips, Reed & Prince screws Nos. 0 to 12; other end slotted screw bit 9/32" wide.

No. 27B Bit: Slotted Screw bit 3/16" wide and 1/8" hex socket key.

No. 27C Bit: Keys for hex sockets 5/64" and 3/32".

No. 27D Bit: Keys for hex sockets 5/32" and 3/16".





Starting a screw with bit installed.



K-D2]-P Ratchet Wrench with No. 27A Bit . . . single end wrench with 5/16" opening overall length 2\%". Net wt., 1\\(\frac{1}{2}\) oz.

#### K-D 20 SOCKET SCREW KEY SET

A necessity for every mechanic, everyday

11 Hex keys packed in handy rust-proof metal kit with hinged retaining clamp,—PLUS—#31 Extension handle to use on short end of key when long end must be used to turn screw, as in illustration below. Short end of key fits into hole in end of extension. 2 holes in end shown, accommodate keys from .050" to ½". Larger hole in opposite end from ½" to ¾".

Quick reading chart stamped into container. The size and data required are always at fingertips. Tools accurately forged and correctly tempered.



Sizes .050 to 3/8"



#### THIS CHART STAMPED INTO CONTAINER

Key	Size	.050"	1/16	5/64	3/32	1/8	5/32	3/16	7/32	1/4	5/16	3/8
Screw	Set	4	5-6	8	10-12	1/4	5/16	3/8	7/16	1/2—9/16	5/8	3/4
Sizes	Car			4	5-6	8	10-12	1/4	5/16		3/8-7/16	1/2-9/16

# K-D 29 SOCKET SCREW KEY KIT

Handy pocket size plastic kit containing 7 regular K-D hex keys plus K-D No. 28 Extension Handle. Set contains 1 key each in following sizes: 5/64", 3/32", ½", 5/32", ½", 5/32", ½", ½". See chart below for sizes. Kit 3½" wide by 5½" high. Net wt., 7 oz.



#### K-D EXTENSION HANDLES

For use on short end of key when long end must be used to turn screw. Short end of key fits into hole in end of extension. Diagram below shows large counterbore in one end, 2 counterbores in opposite end. All steel, rustproof cadmium finish.



K-D No. 31 Extension Handle included in No. 30 Set accommodates keys from .050" to \(^{8}\)". Length 5 \(^{3}/16''\). Net wt., 5 oz.

K-D No. 28 Extension Handle included in No. 29 Kit accommodates keys from .050" to \(^{1}\psi^{\circ}\). Length \(^{3}\gamma^{\circ}\). Knurled grip. Net wt., 2 oz.

#### K-D INDIVIDUAL SOCKET SCREW KEYS

K-D Socket Screw Keys are intermediate lengths compared with standard long and short keys. They are practical lengths for all around work. Order keys by Hex size. Column D.



C = Length, long end

B = Length, short end

		SOCKET SC	REW SIZES		-		
Hollow Set Screws	Socket Head Cap Screws	Flat Head Cap Screws	Stripper Bolts	Pipe Plugs	D	C	В
No. 4 No. 5 & 6 No. 8	No. 4	4 6			$.050''$ $\frac{1}{16}''$ $\frac{5}{64}''$	$1\frac{5}{8}''$ $1\frac{15}{16}''$ $2\frac{3}{16}''$	1" 2 9" 16 5"
No. 10  1/4"  5/16"	No. 5, 8, 6 No. 8 No. 10	8 10 ½"	1" 4 5"	1 m	$\frac{3}{32}''$ $\frac{1}{8}''$ $\frac{5}{32}''$	$2\frac{7}{16}''$ $2\frac{11}{16}''$ $3''$	5" 3" 4 7"
$\frac{3''}{8}$ $\frac{7}{16}''$ $\frac{1}{2}'' & \frac{9}{16}''$	1" 5"	5" 16" 3" 8"	38" 12"	½" ½"	$\frac{\frac{3}{16}''}{\frac{7}{32}''}$	$3\frac{5}{16}''$ $3\frac{3}{4}''$ $4\frac{1}{8}''$	7" 1" 118"
5" 3"	3" & 716" 1"	½" 5" & ¾"	5" 3"	3" 1"	5 " 16 3"	45" 5½"	1½" 1¾"

#### K-D TOOL KITS . . . containing essential tools for small work!

These kits appeal to everyone-men, women, and youngsters because they are so handy for fixing "small things". Fine for sportsmen, hobbyists; indispensable around the home, office, or workshop. Ideal as gifts, premiums or Pliers beautifully fashioned from alloy steel, tempered to last a lifetime. Each 41/4" long. Chrome plated pliers are chrome plated over copper and nickel base. Screwdrivers have hardened and ground blades. Packed in attractive plastic case. Cases can be gold imprinted. Submit your copy for quotation.

#### 4B, 4A, 4 KITS

No. 4B KIT Two chrome plated, alloy steel pliers (slip joint and needle nose) plus ambered handle 33/4' screwdriver, in light blue plastic kit. Kit  $3\frac{1}{2}$ " wide, 5" high. Net wt., 4 oz.



No. 4A KIT Same as No. 4B Kit (Chromium plated pliers) but without screwdriver. Net wt., 4 oz.

No. 4 KIT Same kit as Nos. 4B, 4A Kits,-with cadmium plated pliers, no screwdriver. Net wt., 4 oz.

#### 5, 5B KITS

No. 5 "IT-KIT": Two chrome plated alloy steel pliers, plus a 3-in-1, brass screwdriver. Handle blue enameled. Navy blue plastic case with button



down flap. Kit 33/4" wide x 41/2" deep, folded. Packed in attractive gift box. Net wt., 5 oz.

No. 5B KIT: Like No. 5 Kit with cadmium plated pliers, plain brass screwdriver. Gift box at extra charge.

#### 5K KIT

Deluxe kit contains 2 chrome plated alloy steel pliers blue enameled 3-in-1 screwdriver, chrome



plated alloy steel 41/4" ball peen hammer, stainless steel 4" rule. Rule calibrated to mms. and 1/32". Navy blue plastic case, button flap. Kit 5" wide x 4½" deep, folded. A very special, life-time gift, packed in attractive box. Net wt., 7½ oz.

No. 5 K-C Kit. Same as No. 5K Kit except pliers and ball peen hammer are cadmium plated; 3-in-1 screwdriver is in brass.

#### 10K **PLIERS** KIT



A handy pocket size roll with 4 distinct types of jaws: No. 6 Standard with slip joint; No. 7 Parrot with slip joint; No. 8 Needle; No. 9 Flat. Each 41/4 long. Forged steel, jaws milled. handles knurled, all tempered to correct hardness. Cadmium plated, rustproof finish. Roll measures  $3'' \times 4\frac{3}{4}'' \times \frac{1}{2}''$  thick, folded. Net wt., 6 oz.





#### 11K PLIERS KIT

Pocket size crimson plastic kit containing 3 cadmium plated, alloy steel pliers (Nos. 6, 7, 8). Kit 4% wide by  $5\frac{1}{4}$  high. Net wt., 5 oz.

#### No. 12K TOOL KIT

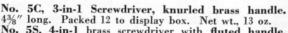
Contains one No. 6 Standard nose, chrome plated pliers; amber handle 23/4" screwdriver: stainless steel 4" rule calibrated to mms. and  $\frac{1}{32}$ "; half round



jewelers file 41/4" long. Packed in attractive plastic case. 21/8" wide x 43/4" Packed in athigh, folded. Net wt., 5 oz.

No. 12K-C KIT: Same as above except pliers cadmium plated.

#### **K-D SCREWDRIVERS**

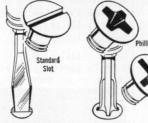


No. 5S, 4-in-1 brass screwdriver with fluted handle, 65/8" long. Handle can be imprinted with not more than two lines. Submit your copy for quotation. Packed in gift box.

No. 5D, 4-in-1 Screwdriver, knurled brass handle, 6\%" long. Packed 12 to display box. Net wt., 2 lbs., 3 oz.

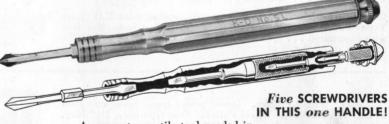
#### FITS-ALL SCREWDRIVER

## Fits all 3 slots



4 BLADES FOR SLOTTED SCREWS





A compact versatile tool needed in Features a patented reversible bit. every toolbox. One end fits ALL Phillips head type AND Reed and Prince type screwheads Nos. 0 to 10. Opposite end 3/16" wide bit for slotted screws. Fluted brass handle contains 3 smaller sizes standard blades. All blades correctly shaped and tempered. Packed 12 to colorful sales display card, easel backed. Net wt., 4 oz. each. 634'' long. Can be imprinted, not more than two lines. Write for price.



## K-D 10 TRAV-L-RAK

For hanging clothes in autos, neatly.

#### Every Motorist is a prospect for a pair!

Low cost, auto clothes hanger holds on car window without bolting or assembling. Window can be closed tight. Deep flange prevents Trav-L-Rak from jumping off when window is open. Special safety catch prevents hangers from falling off. Holds many garments crease and wrinkle free. Light weight, strong, neat looking with rustproof, cadmium finish. Can be imprinted one to five lines using 1/16'' high letters for advertising souvenir. Submit your copy for quotation.



INDIVIDUALLY CARDED One TRAV-L-RAK on a fast selling display card for tables, counters, or bins.  $3\frac{1}{8}$ " wide x 5" high. Carton of 12. Net wt.

K-D 49





#### CARDED FOR SALES DISPLAY

12 TRAV-L-RAKS on 3 color easel-back display card, 11" wide x 14" high. For Filling Stations, Dealers, etc. TRAV-L-RAKS quickly slip in or out of slots in card. Net wt. 2 lbs.

#### K-D1500TIRE PROBING TOOL

Spreads tread for easy removal of foreign bodies

A necessary tool for everyone who renders tire service. Provides a fast, safe

means of spreading cuts in the tread without danger of cutting or mutilating tire. Prompt removal of imbedded foreign bodies lengthens the life of the tire. A quick check of tires provides garages and service stations with another customer good will service.

Sturdy, all-steel construction. Tempered steel probes. Rust-proof cadmium plated finish. Length 6". Net wt., 5 oz.





Insert probes of tool lengthwise into cut.

2 Turn tool at right angles to cut, press handles together to spread jaws, exposing imbedded object. Pry out with any pointed instrument or grip with serrated inside face of jaws and lift out. Removes all question of doubt—you see when a cut is clean.

#### K-D HAMMER TYPE AND 'BINGO' WHEEL PULLERS\*

# For quick removal of wheel hubs without damage to the axles.

These Pullers provide a quick, convenient method for jarring wheel hubs loose without damage to axles. The threads are guaranteed not to strip. Pullers specially heat treated for hard service. Short style only in complete range of thread sizes. All sizes  $1\frac{3}{6}$ " long excepting:  $1\frac{1}{6}$ " x 7 is  $1\frac{1}{2}$ " long;  $1\frac{1}{4}$ " x 7 and  $1\frac{1}{2}$ " x 6 are  $1\frac{3}{4}$ " long.

K-D 800 Puller Set. The five most popular sizes K-D Short Type Wheel Pullers in sturdy fiber metal edge box. Box free with assortment . . .  $\frac{5}{8}$ " x 18,  $\frac{3}{4}$ " x 16,  $\frac{7}{8}$ " x 14, 1" x 14, and  $\frac{11}{4}$ " x 12. Net wt., 2 lbs., 5 oz.

K-D Short type Wheel Puller.





\*K-D Hammer Type and 'Bingo' Wheel Pullers furnished in following axle sizes:

5%" x 18
34" x 16
34" x 20
18" x 16
7%" x 14
7%" x 16
1" x 14
11%" x 7

1½" x 7 1½" x 12 1¼" x 7 1½" x 12 1½" x 12

Axle size charts for Passenger Cars & Trucks Pages 23-26

"BINGO" Wheel Pullers. Lower priced line. Same axle sizes as K-D Hammer Type Wheel Pullers. One type only,  $2\frac{1}{4}$ " long, not subject to return for replacement.



No. 800B "BINGO".  $\frac{5}{8}$ " x 18,  $\frac{3}{4}$ " x 16,  $\frac{7}{8}$ " x 14, 1" x 14,  $\frac{11}{4}$ " x 12. Bingo Pullers in metal edged fibre box.



#### AXLE SIZE CHARTS ...

#### PASSENGER CARS

	Axle Size	Transfer of the second	Axle	Siz	e III
AUBURN		ESSEX	5/11	. 1	. 11
'27-'31: 6-66A, 6-66B, 6-76, 6-80, 8-88, 8-90, 8-95,	7/11 - 14	'24-'31: Super 6, Challenger 6, to No. 1250858 '31-'32: 6 Cyl. No. 1250858 to 1266772, 6 Cyl.,	5/8"	хЛ	18
6-85	%″ x 14	after No. 1266772, Pacemaker 6	7/8" :	x 1	8
12-161A, 12-165, 6-52, 6-53, 6-54, 8-50, 8-51, 8-52	1" x 14	'10-'42: Mod. T-56" Tread, A, B, V8, 18, 40-V8,			
AUSTIN		48, 50, 67, 68, 73, 74, 77, 78, 81A, 82A, 81C,			7
'30-'31: All models	5/8" x 18	82C, 91A, 91C, 99A, 99C, 922A, 922C, O1A,			W
AUSTIN (Amer) '30-32: All models	5/8" x 18	O1C, O9A, O9C, O22A, O22C, 11A, 11C, 19A,			
BUICK		19C, 1NC, All Ford & Mercury '42; '48 Pass.	5/8"	w 1	10
'26-'36: Standard 6-115" W. B., Standard 6-116"		and Comm.	78	X J	10
W.B., Ser, 40-6 Cyl., 8-60, 8-50, 36-90	1" x 14	FRANKLIN	3/4"	w 1	16
'29-'35: Master 6-121" & 129" W. B., Ser. 50 &	11/// 19	'33-'34: All Models except Olympic 18 & 18B '33-'34: Olympic 18, 18B	7/8"		
60, 6 Cyl., 8-80, 8-90	3/4" x 16		/8		
	/4 X 10	GRAHAM (Graham-Paige) '28-'29: 610; '35-'36: 74, 80, 80A-Crusader; '37:			
CADILLAC		90A, 95-Standard Ratio, 85-Crusader	7/8"	x	14
'29-'31: 353, 355, 355-A-V8, 370, 370A-V12, 452, 452A-V16; '32-'33: 355B, 355C-V8, 370B, 370C-		28-29: 614; 28-30: 619, 621, 629, 827, 835,	70		
V12, 452B, 452C-V16; '34-'35: 355D, 355E,		837; '33-'35: 65, 67, 68, 8-72, Spec. 6-73	1"	x :	14
370D, 370E, 452D, 452E; '36: 70, 80; '36-'37:		'29-'30: 612, 46 Std. 6; '30-'31: Prosperity 6, 53,			. 11
75, 80, 90; '38-'40: 90, 75 (Except 161" W. B.);		54, 56	3/4"	x .	16
'38-'40: 75 (161" W. B.)	11/8" x 12	'29-'31: 615, 45 Spec. 6, 42 Std. and Spec. 8,			
'36: Ser. 60; '37: 60, 65, 70; '38-'40: 60, 60S,	1" 14	822, 834; '31-'33: Std. 6, Spec. 6, 820; '32-'35: 57, 57A, 58, 64, 69, Sup. 8-75	11/8"		12
61, 65, 72; '41-'42: 60S, 61, 62, 63, 67, 75	1" x 14	를 잃었습니다. (2018년 1일 전 1일 : 14 1일 전 1일 : 14 1일 :	1/8		.
CHEVROLET	5/// - 10	'21-'29: Mod. O, Super 6	7/8"	v .	14
'15-'23: 490'25 '20. K V AA ABA	5/8" x 18	'30-'31: 119" W. B. to No. 921767, 126" W. B.	/8		.
'24: 490 Superior; '25-'29: K, V, AA, AB-4 Cyl., AC-6 Cyl.; '30-'31: AD, AE-6 Cyl.; '32:		to No. 59692	5/8"	x :	18
BA-Small Taper	3/4" x 16	'31-'32: 119" W. B., 126" W. B., Pacemaker 8			
'32: BA-Large Taper	$\frac{13''}{16}$ x 16	'33-'42: Super 6, Std. 8, Major 8, G-6 Cyl., GH,			
CHRYSLER		LL, LT-Light 8 and DeLuxe 8, 83, 84, 85, 87,			
'26-'28: 4-50, 4-52; '29-'31: CC-6, CJ-6, 6-66;		92, 93, 95, 97, 98, 40C, 41, 43, 44, 47, 10C, 11,			
'30-'31: CD-8; '31-'32: CM-6, CI-6; '33: CO-6;		12, 14, 15, 17, 18, 90, 89, 40P, 40T, 10P, 10T, 20C, 21, 22, 24, 25, 27, 20P, 20T; All '48-'49	3/4"	v ·	20
'34: CA, CB-6 Cyl.; '35: C6, CZ-Airstream 6 &		HUPMOBILE	/4	-	-
8; '36: C7, C8-Airstream; '37-'42: C14, C16,		'28-'34: A6, A7, Century 6, MI, MM, Century			20
C18, C19, C22, C23, C25, C28, C30, C34, C36	$\frac{3}{4}$ " x 16	8, M-8 130" W. B., C-8, CWS-8, 221, S-6, H-8,			
'27-'28: 6-60, 6-62, 6-70, 6-72; '27-'29: Imp. 6-80; '28-'29: 6-65, 6-75; '29-'31: 6-70, 6-77; '30-'32:		U-8, 225, 237, L-8, 216, 218, 214, 321, 321A, 421,			
Imp. 8, Imp. Custom 8, CG-8, CH-8, CL-8;		421A, 222, 226, 322, 326, 422F, 4261	7/8"		
'31-'33: DeLuxe 8, CP-8, CQ-Imp.; '33: CT-		'34-'35: 427T, 527T		X	12
Royal 8, CQ-Imp. 8; '34-'37: CU, CV, CI, C2,		'34-'36: 417W, 517, 421J, 521J, 518D, 618G,			14
C3, C9, C10, C11, C17-Airflow; '37-'39: C15,		621N	. 1"	X	14
C20, C24; '40-'42: C27, C33, C37	7/8" x 14	KAISER-FRAZER	1//		,,
Passenger & Station Wagon 1948-49	$\frac{3}{4}$ " x 16	'47-'49	1	X	14
CONTINENTAL	3/// 16	LAFAYETTE	1//		
'32: 4 & 6 Cyl'33-'34: Ace	3/4" x 16 7/8" x 14	'34: To ser. 15922			
	/8 4 14		78	^	14
DE SOTO '28-'42: All; '48-'49: All	3/4" x 16	'27-'33: 303, 328, 340, 345, 345A, 345B, 345C	11/4"	v	12
DEVAUX	/4 1 10	'34: 350; '35-'36: 35-50, 36-50; '37: 50; '39: 50	1/8	•	
'31-'32: 6-75	3/4" x 16	(156" W. B. only); '38-'40: 38-50, 39-50 (Ex-			
네트트 (1912) (1922) 그렇게 하게 하다 하다는 사람이 되는 것이 하고 있었다. (1914) 다 나는 사람이 되었다.	/4 A 10	cept 156" W. B.), 40-52 and 40-50		x	14
<b>DODGE</b> '26-'27: 124-4 Cyl. No. A831147 to A930663,		LINCOLN			
Senior 6, No. 10001 to 1S15045; '27-'28: 128,		'36-'37; Zephyr, All 1948	5/8"	x	18
129 Fast 4 No. A930664 to A1019544, Stand. 6,		MERCURY			1
Victory 6; '27-'29: Senior 6, No. 1815045 to		1948 All	5/8"	X	18
1S29156; '29-'30: DA-6; '29-'30: Senior 6, DB-6		MARMON			
after S50001; '32: DK-8, '33: DO-8	%" x 14	'27-'31: Little 8, L, 68-First Series, 68-Second			
'30-'36: DD-6, DH-6, DJ-6 Taxi, DC-8, DG-8,	· The Delt	Series, 78, Roosevelt 8-70, 69			
DP-6, Six, DR, DS-6 Cyl., DU-6, D1, D2; '37-	HE WE	30-32: 79, 125	1"	X	
'42: D5, D-17, D8, D11, D14, D19, D22; '48-'49:		'31-'32: 140, V16	1 1/8"	X	12
All, also Station Wagon	3/4" x 16	NASH			
DURANT		'17-'30: 4 & 6 Cyl., Spec., Advanced, Ser. 400,			
'24-'29: 40, 55, 60, 63, 65, 66, 70, M, M2, M4, 75		Twin Ign. 6, 430, 440, 460, 480; '30-'32: Twin Ign. 8, 490, 890, 990; '32-'33: 1080, Spec. 8; '32-			
to No. 2200, 70, 75, 80 after No. 2200		'33: 1090, 1190 Adv. 8, Ambassador 8, 1180;			
'30-'32: 610, 612, 614, 619, 621, 622	$\frac{3}{4}$ " x 16	'34: 1290-Amb. 8; '34-'35: 1220-6, 1280-8, 3520-			
ERSKINE	UTION AND	6, 3580-8 to No. 296609; '35: Lafayette 3510			
27.29: 50, 51, 52		after No. 15922; '35-'40: 3520, 3580, 3680, 3780,			
290. 52	7/1 + 14	3990 3090 and 4090 (Revel Cear) · '36-'30			

	Axle Size	,	4 1		
NASH (Cont'd)	TATE SIZE	PLYMOUTH (Cont'd)		le Si	ze
3620, 3720, 3820, 3920-Nash, 3610, 3710, 3810, 3910-Lafayette; '39-'40: 3980, and 4080 (Hypoid		P5, P6, P7, P8, P9, P10, P11, P12, P14; '48-'49:		,	
Gear); '40-'42: 4010, 4020, 4160, 4180, 4260,		PONTIAC	PIN	' x	10
4280, 4140, 4240	7/8" x 14 3/4" x 16	'26-'28: All	3/4"	' x :	
'32-'33: 1060-Light 6, 1070-Std. 8, 1120, 1130,		'29-'32: Big 6 & 8	7/8"	' x :	14
1170	1" x 14 1%" x 14	'24-'35: T6, Flying Cloud, Master, A. C. Wol-			
OAKLAND	/6 11 11	verine, 2B, Mate, 15, 8-30, Royale 8-31, 8-35,			
'16-'31: 34, 34B, 34C, 34D, 6-44 with 31 x 4		8-52, S, 2S, 3S, 4S, 6 Cyl	7/8"	x	
Wheels, Sport and 2 Pass. with 32 x 4 Wheels, 6-44 with 32 x 4 Wheels, except Sport and 2		ROCKNE	7.0		y.
Pass., 6-54, All American 6, 8-19, 8-101	7⁄8″ x 14	'32-'33: 6-75, 6-65, 10	7/8"	x ]	4
OLDSMOBILE '15-'19: 44, 45, 8 Cyl	11/4" v 19	STAR '22-'30: C-one-piece housing, F, M, R, 4 & 6			
'21-'23: 43A, 47, 4 Cyl	7/8 x 12	Cyl		x 1	8
'29-'36: Viking 8, D, E, F, 6 Cyl., F32-6 Cyl., L32-8 Cyl., F34-6 Cyl., F33-6 Cyl., L33 & L34-		STUDEBAKER			
8 Cyl., F-35, F-36, L-35, L-36	1" x 14	'19-'30: Big 6, Spec. 6, Pres. 6, Com. 6 No. 4000000 to 40705000, Pres. 8; '34: Mod. C-Pres.			
PACKARD		8; '35-'37: 1B-Commander, 1C-President, Mod.			
'23-'32: St. 8, 1-26, 1-33, 2-26, 2-33, 3-26, 3-33, 4-26, 4-33, 5-26, 5-33, 6-26, 6-33, 640, 645, 740,		2C, 3C, Pres. 8; '38-'42: 7A, 8A, 9A, 4C, 5C, Pres. 6C, Com. 10A, Champion 1G, 2G, 3G, 4G	1"	x 1	4
745, 726, 733, 840, 845, 826, 833, 901, 902,	1//	19-37: 4 Cyl., Light 6, Std. 6, Dictator 6, Com-			-
Custom 8, DeLuxe 8, 903, 904	1" x 14	mander 6, Commander 8, 8-70, Dictator 6, Dictator 8, 8-61, 6-53, 6-54, 6-55, 6-56, Dictator 8-62,			
Brake Drums, 1002, 1100, 1101, 1102, 1003,		Commander 8-73, Commander 8-71, Pres. 8-82.			
1004, 1103, 1104, 1105, 120, 120B, 120C-8 Cyl., 115C-6 Cyl., 1203-4-5, 1403-4-5, 1200-1-2, 1400-		Pres. 8-91, 8-92, Mod. A-Dictator 6, Mod. B-Commander 8, 1A, 2A, 3A, 4A, 5A, 6A—Dicta-			
1-2, 1500-1-2, 1603-4-5, 1600, 1601, 1700, 1701, 1703, 1801, 1803, 1804, 1806, 1807, 1901, 1903,		tor 6	7/8"	x 1	4
1904, 1906, 1907, 1601A, 1602, 1702, 1705,		3G; '48-'49: Champion	3/4"	x 1	6
1801A, 1803A, 1805, 1808, 1901A, 1903A, 1905, 1908, 2003, 2008	7/// 14	'48-'49: Commodore		x 1	
'40-'42: 1800, 1900, 1900T, 2000	7/8" x 14 3/4" x 16	TERRAPLANE '32-'38: Terraplane 6, Terraplane-K6 and KT8,			
'48: 2201, 2202, 2211, 2232, 2240'48: 2206, 2213, 2220, 2222, 2226, 2233	3/4" x 16	K, KU, G, GU-Terraplane, 61, 62, 70, 71, 72,			
'49: 2301, 2302, 2311, 2332, 2340	%" x 14 %" x 16	80, 81, 82, 88	3/4"	x 2	0
'49: 2306, 2313, 2320, 2322, 2326, 2333 PEERLESS	7/8″ x 14	'26-'30: 96, 96A, 93A-6 Cyl., 98, 98A	7/6"	x 14	4
'27-'32: 6-60, 6-61, 6-81, A-Standard St. 8	7⁄8″ x 14	WILLYS	70		
'29-'32: 125 First Series, 125 Second Series,		'30-'32: 6-98B, 8-80, 6-90, 6-90A, 6-97, 6-98D, 8-80D, 8-88	7/8"	. 1	1
Std. 8, 8-85, 8-95, B-Master St. 8 PIERCE-ARROW	1" x 14	'33-'36: 4-77	3/4"		
24-28: 80, 81	7∕8″ x 14	'48-'49: Jeep 2 & 4 whl drive'48-'49: Sta. Wagon, Jeepster, Panel Delivery	1"	x 14	1
'28-'29: 81, 133, 144	1" x 14	WILLYS-KNIGHT	/8	A 1-	E
PLYMOUTH  '28-'42: Q, U, 30U, PA, PB, 4 Cyl., PC, PD-6		'22-'31: 20A, 64, 65, 66, 66A, 67, Great 6, 66B.	1"	x 14	Ļ
Cyl., PE DeLuxe 6, PF-6, PJ-6, P1, P2, P3, P4,		'26-'33: 70, 70A, Special 6, 56, Standard 6, 70B, 87, 6-95, 66D, 66E, 57	7/8"	x 14	
	TDI				
ACME 9. DUG	TRU				
ACME & BUS '23-'39: 14, 16, 20, 20L, 21, 24, 30	1" x 14	BROCKWAY & BUS (Cont'd)			
25-26: 41	1/2" x 12	'25-'32: E3-4-9-15, EB4-6-7-8-9-11-16, EB-Bus, Junior, E3 to E25, EB4 to EB21, JB, JBF,			
'28-'29: 14, 16	7⁄8″ x 14	Junior 2-3-4, Junior 5-6-7, JF, 65, 75, 60	1" :	x 14	,
<sup>2</sup> 25- <sup>2</sup> 30: 20, 30	1/4" x 7	CHEVROLET  '26-'29: R, X, LM, LO, LP, LQ-6 Cyl	1"		
26-27: 30	½" x 12	26-32: Capitol—Commercial, AD, AE Com-	1"	x 14	
*27-*30: 30P		mercial, BB-Small Taper	3/4"	x 16	
'24-'30: 21, 30, 30B, 50	1/6" x 12	'30: LR			
ATTERBURY	97.00	PC, PD, QA, QB, QC, & QD 1	1/4"	x 12	
'24-'27: 24R, 30R	1/2" x 12	'32: BB-Large Taper CLINTON	16	x 16	
AVAILABLE '24-'25: JH, L	1/6" x 19	'27-'29: 2½-3 T	1/2"	x 6	
'25-'26: Hustler	1" x 14	'28-'31: 1¼-1½ T'26-'28: 2B, 32, 42	1" >	x 14	
'25-'26: L1½	1/4" x 7	24-28: 45	1/2"	12	
*29-30: 45 Express	1/4" x 7	CLYDESDALE			
BROCKWAY & BUS		'25-'30: 10A, 12, 14, 16	1" x	14	
'24-'30: S13 to S31, SK8 to SK11	½" x 12	29-30: 30 1	/2 X 1/4" X	12	
			400000		

PASSENGER CARS (Cont'd)

#### TRUCKS (Cont'd)

COMMERCE 27-728: BA; 28-30: S11, 20B, 20Y, 20Z, 25Z	rice as (cont a)		
227-23: A1 28-30: S11, 20B, 20X, 20Z, 25Z	COMMERCE	Axle Siz	
25-28: Dist. 7, Super, II, DII, SDII		1// 1	
22-22: 14, 514			
CORTREDSON			
25°21°28°29°30°21°31°31°31°31°31°31°31°31°31°31°31°31°31		1/2 1	
27-28: 30, 21 %" x 14 27-28: 45		1" - 1	
DART 27:28: 45			
227-28: 45		/8 A I	
29-30: 30G		11/" - 1	100 Day Day
DAY-ELDER & BUS 24-27; RN, RL, 20 Bus			
24-27; RN, H, 20 Bus		1/4 1	
22-22; AN. C		11/// 1	100# ID 140#
DEFIANCE RI, 45, TT, 50C, FL  1' x 14  DIMOND T  24-28: T, T2  23: 302  24-34: Q, 04, 05, 75, 76, 77, 150, 151, 2108F  21ISF  DIVCO  27-33: All Models  1' x 12  DODGE & BUS (Dodge-Graham)  24-30: G, B, G Boy, EC, IC, CB Bs, BE, BE  133" W, B, 1E440" W, B.  1' x 14  DIVCO  25-28: All; 27-30: D, C, LB & MB Bus, LE,  ME, 0E, TE  132" W, B, DE124" W, B, DA 1  DDN, DDN, DE120" W, B, DE124" W, B, DA 1  DODGE & BUS (Dodge-Graham)  DDN, DE120" W, B, DE124" W, B, DA 1  DONGE & BUS (Dodge-Graham)  DN, DE120" W, B, DE124" W, B, DA 1  DN, DE120" W, B, DE124" W, B, DA 1  DN, DE120" W, B, DE124" W, B, DA 1  SOUTHEX  DOUTLEX  29-33: Commercial  ME, OE, TE  1' x 14  26-28: S14, S16  26-28: S14, S16  27-28: B6  1' x 14  26-28: S14, S16  26-28: S14, S16  1' x 14  26-28: S14, S16  26-2			tor too D II D . ID MD ID IC D
DEFIANCE RU, 45, TT, 50C, FL DIAMOND T 24-29: TT, 2 29: 302 11/4" x 7 24-34: O, 04, O5, 75, 76, 77, 150, 151, 2108F 2118F 2118			
RIL   45, TT, 50C, FL		/8 1	
DIAMOND T   24-29: T. T. 2   15/2   12   28: 302   10/2   27: 302   10/2   27: 302   10/2   27: 302   10/2   27: 302   10/2   27: 302   10/2   27: 302   10/2   27: 303   31   Models   10/2   12   27: 303   32: 60- 30   10/2   10/2   27: 50- 50   10/2   27:		1" - 1	220 221 44 6 11
224-236 T. T. 2 226 307 237 2434 O. O. O. O. S. 75, 76, 77, 150, 151, 2108F 211SF 21VCO 27-733 All Models 11/4" x 12 2000GE & BUS (Dodge-Graham) 24-30 C. G. B. G. Boy, EC, IC, JC Bus, BE, BE 133 W. B. B. E149/ W. B. B. C. B. L. 25 C. S. C. C. D. C. L. B. & MB Bus, LE. 26 C. S. C. C. D. C. L. B. & MB Bus, LE. 27 S. C. C. D. C. L. B. & MB Bus, LE. 28 C. C. C. D. C. L. B. & MB Bus, LE. 29-30 C. Commercial, SD. Pand Delivery, D.		1 1 1	
293: 302 242-34: 0, 04, 05, 75, 76, 77, 150, 151, 2108F 2118F DIVCO 27:733: All Models 11½" x 12 DODGE & BUS (Dodge-Graham) 24:30: G, B, G Boy, EC, IC, IC Bus, BE, BE 133" W. B., IE:140" W. B. 1" x 14 25:252: All, 12'7:30: D, C, LB & MB Bus, LE, ME, OS, TE, DION, DEL20" W. B., DEL40" W. B., D. 1 yar x 12 25: 60-70 27:233: All Models 11½" x 12 25: 60-70 27: 233: All Models 11½" x 12 25: 60-70 27: 233: All Models 11½" x 12 25: 60-70 27: 233: All Models 11½" x 12 25: 60-70 27: 238: Be 6 11½" x 12 25: 60-70 27: 238: Be 6 11½" x 12 25: 60-70 27: 238: Be 6 11½" x 12 25: 60-70 27: 238: Be 6 11½" x 12 25: 60-70 27: 238: Be 6 11½" x 12 25: 60-70 27: 238: Be 6 11½" x 12 25: 60-70 27: 238: Be 6 11½" x 12 25: 60-70 27: 238: Be 6 11½" x 12 27: 238: Be 6 11½" x 12 27: 28: Be 6 11½" x 12 28: 28: G, GS 11½" x 12 28: 28: 14; Midual Midua	DIMINOTED I	11/// 1	
2434: O, O4, O5, 78, 76, 77, 150, 151, 2108F, 1' x 14 DIVCO 27:7-33: All Models 11/4" x 12 DIODGE & BUS (Dodge-Graham) 24:30: G, B, G Boy, EC, IC, JC Bus, BE, BE 133" W. B, IE-140" W. B. DE 124" W. B, DA 1   %" x 12 25:28: All; 27:730: D, C, LB & MB Bus, LE, 11/4" x 7 26:31: Commercial, SD, Panel Delivery, DD, DOVER 29:30: Commercial   5/4" x 18 DUPLEX 29:30: Freighter   1/4" x 12 29:32: Freighter   1/4" x 12 29:32: Freighter   1/4" x 12 29:32: Freighter   1/4" x 14 29:33: 10   1/4" x 12 29:30: 36: A, AB B			0.1037 0.037
211SF DIVCO 27.733: All Models 27.733: All Models 11/4" x 12 DODGE & BUS (Dodge-Graham) 27.2430: G, B, Boy, EC, IC, JC Bus, BE, BE 133" W. B., 1E.140" W. B.		1 1/4 X	
DIVCO   27-733   All Models   11/4" x 12		1" v 1	[2] 사이트 [1] 시간
227-33; All Models		1	
DODGE & BUS (Dodge-Graham) 2430: G, B, G Boy, EC, IC, JC Bus, BE, BE- 133" W, B., IE-140" W, B. Det 19. 25-28: Ali: 27-30: D, C, LB & MB Bus, LE, 25-28: Ali: 27-30: D, C, LB & MB Bus, LE, 25-26: D, D-6 11/4" x 7 26-31: Commercial, SD, Panel Delivery, DD, DX, DE-120" W, B. De-124" W, B., DA 1 %" x 14 29-42: SE, F10, UF10-109" W, B., HC, HCL, KC, KCX, KCX, KCL, LC, MC, RC, TC, TD15, VC, VD15, WC, WD15 %" x 16 DOVER 29-30: Commercial %" x 18 31-32: Commercial %" x 18 DUPLEX 26-33: GF, GH, GS 11/4" x 12 26-23: 30: GF, GH, GS 11/4" x 12 26-29: 100 %" x 14 29-32: Freighter 11/4" x 12 29-32: Preighter 11/4" x 14 29-32: Freighter 11/4" x 14 29-33: 13/4 x 15 29-30: 13/4		11/" - 1	205 (0.50
22-23: G, B, G Boy, EC, IC, JC Bus, BE, BE. 133" W. B., 1E:140" W. B. 134" W. B., 1E:140" W. B. 135-228: Ali, 27:30: D, C, LB & MB Bus, LE, ME, OE, TE ME, OE ME,		1-/4 X 1	
133" W. B.   E-140" W. B.   1" x 14   25-26: D, D6   14" x 5   25-28: Al, B, D6, C   B & MB Bus, LE   ME, OE, TE			
S3-28; All; 27:30; D. C. LB & MB Bas, LE   ME, OE, TE   14" x 7   26-521; Commercial, SD, Panel Delivery, DD, DDX, DE-120" W. B., DE-124" W. B., DA 1   7" x 14   29-32; SE, F10, UF10-100" W. B., HC, HCI., KC, KCX, KCL, KCLX, LC, MC, RC, TC, TD15, VC, VD15, WC, WD15   7" x 16   24-20; SJ4, SJ6   11/4" x 12   24-25; O. Commercial   7" x 18   72-30; Commercial   7" x 18   72-30; Commercial   7" x 18   72-30; Gommercial   7" x 18   72-30; Gommercial   7" x 18   72-30; Gommercial   7" x 18   73-32; Commercial   7" x 19   73-32; Commercial   7" x 14   73-33; 101   11/4" x 12   72-32; Packet; 79-341; FH-1, FXH-1, FI-1, FXJ-1, FKJ   7" x 14   72-32; Packet; 79-341; FH-1, FXH-1, FJ-1, FXJ-1, FKJ   7" x 14   7" x 1		1// - 1	107 107 D D C
ME, OE, TË		1 X 1	
26-31: Commercial, SD, Panel Delivery, DD, DDX, DELi2f W B, DB DA1 L % x 14   29-32: SE, F10, UF10-109" W. B, HC, HCL, KC, KCX, KCL, KCL, KC, MC, RC, TC, TD15, VC, VD15, WC, WD15		11/." v	
DDX, DE-120" W. B., DE-124" W. B., DA 1		1/4 A	
29-42; SE, Fl0, UF10-109" W, B, HC, HCL, KC, KCX, KCL, KCLX, LC, MC, RC, TC, TD15, VC, VD15, WC, WD15   34" x 16		7/6" x 1	4 '26-'28: SJ4, SJ6
KC, KCX, KCL, KCLX, LC, MC, RC, TC, TD15, VC, VD15, WC, WD15		/6	
TDIS, VC, VD15, WC, WD15			HALFUR
DOVER	TD15, VC, VD15, WC, WD15	3/4" x 1	6 25-28: G, GS
29-30: Commercial	DOVER		
HENNEY	'29-'30: Commercial	5/8" x 1	
DUPLEX   26-33: GF, GH, GS			
26-33: GF, GH, GS		/0	
FACEOL & BUS   28-31: 20, 24, 10, 14, Ambulance   1" x 14   11   11   11   11   11   11   11		11/9" x 1	2 '26-'31: Hearse, 20, 24, 70, 74
28-29: 100	그렇다 싶으면 없었다. 이번 사람들은 그래요? 하는 것이 되었다면 하는 것이 없는 것이 없었다.	-/-	
"30-33: 101       1/4" x 12         FARCO         29-32: Clipper       %" x 14         29-32: Freighter       1" x 14         29-32: Packet; '39-41: FH-1, FXH-1, FJ-1, FXH-1,		7/4" × 1.	
HUC  29-32: Clipper			
"29-32: Clipper       %" x 14         29-32: Freighter       1" x 14         29-32: Packet; '39-41: FH-1, FXH-1, FJ-1, FXJ-1, FK-1       3/" x 16         FEDERAL & BUS       3/" x 16         "24-26: Federal Knight Express; '27-29: F6, Scout F, 2F6, 2FW       %" x 14         "24-34: S21, S22, S23, S27, T2W, T3W, T6W, T7W, T8, T20, T21, T22       1½" x 12         28-30: 40, A6 Bus       1½" x 12         '29-30: 3F6, 3FW       1" x 14         'ELEXIBLE BUS       1" x 14         '29-32: 15 Pass       1½" x 12         '19-30: TT, AA-Separate Brakes       ½" x 12         '28-33: A, B, 50, 68, 77, 78, 81C, 82C       %" x 18         '30-33: AA, BB       1½" x 12         '24-28: 30 & 30-6       1½" x 12         '29-30: O2Y & S11       1" x 14         GENERAL MOTORS (G. M. C.) Axle Shafts '19-24: K, K16, K20       1½" x 12         '27-29: T10, T11       34" x 16         '29-7-29: T10, T11       34" x 16         '29-7-29: T10, T11       34" x 16         '29-7-29: T10, T11 Pontaic Motor       1" x 14         '29-30: 25: S23, S27, T2W, T3W, T6W, T6W, T2W, T6W, T2W, T2W, T2W, T3W, T6W, T2W, T2W, T2W, T3W, T6W, T2W, T3W, T6W, T2W, T2W, T3W, T6W, T2W, T3W, T6W, T2W, T3W, T4W, T2W, T2W, T2W, T3W, T4W, T4W, T2W, T		7.	HUC
29-32: Freighter		7/2" + 1	
29-32: Packet; '39-41: FH-1, FXH-1, FJ-1, FXJ-1, FK-1			그들은 사람들은 그들은 사람들은 사람들이 되었다면 보다 되었다면 하는 것이 되었다면 그 나는 사람들이 되었다면 하는 것이 되었다면 그 사람들이 되었다.
FXJ-I, FK-I  FEDERAL & BUS  '24-'26: Federal Knight Express; '27-'29: F6, Scout F, 2F6, 2FW  '24-'34: S21, S22, S23, S27, T2W, T3W, T6W, T7W, T8, T20, T21, T22  '28-'30: A6, A6B Bus  '1/4" x 72 '29-'30: 3F6, 3FW  '29-'30: 3F6, 3FW  '29-'30: 3F6, 3FW  '29-'32: 15 Pass.  '19-'30: TT, AA-Separate Brakes '19-'33: AA, BB  '14'' x 12 '28-'33: AA, BB  '14'' x 12 '28-'30: A6, S6, K7, 78, 81C, 82C '8'' x 18 '30-'33: AA, BB  '14'' x 12 '29-'30: OF CANADA  '30-'33: AA, BB  '14'' x 12 '29-'30: QY & S11  GENERAL MOTORS (G. M. C.) Axle Shafts '19-'24: K, K16, K20  '19-'30: T19, T19 Pontiac Motor  '19-'30: T19, T19 Pontiac Motor  '19-'20: T19, T19 Pontiac Motor  '19-'30: T19, T19 Pontiac Motor  '19-'30: T19, T19 Pontiac Motor  '24-'20: Specarate Brakes '19-'24: K, K16, K20  '27-'29: T19, T19 Pontiac Motor  '28-'30: A1 + A1			
FEDERAL & BUS  24-26: Federal Knight Express; '27-29: F6, Scout F, 2F6, 2FW		3/4" x 1	6 25-'29: 111, 400-Clark Rear, 111A, 111X 11/4" x 7
'24-'26: Federal Knight Express; '27-'29: F6, Scout F, 2F6, 2FW       7/8" x 14         '24-'34: S21, S22, S23, S27, T2W, T3W, T6W, T7W, T8, T20, T21, T22       11/2" x 12         '28-'30: A6, A6B Bus       11/4" x 7         '29-'30: 3F6, 3FW       1" x 14         FISHER       1" x 14         '25-'28: Fast Freight       1" x 14         FLEXIBLE BUS       1" x 14         '29-'30: 17, AA-Separate Brakes       7/8" x 14         '30-'33: AA, BB       11/4" x 12         '28-'38: A, B, 50, 68, 77, 78, 81C, 82C       5/8" x 18         FORD OF CANADA       '30-'33: AA, BB       11/4" x 12         '29-'30: 20Y & S11       1" x 14         GENERAL MOTORS (G. M. C.) Axle Shafts       11/2" x 12         '19-'24: K, K16, K20       11/8" x 12         '29-'39: T19, T19 Pontiac Motor       1" x 14     INTERNATIONAL & BUS  '24-'21: 33: CD, Special Del., AW1 1 1" x 14  '21-'34: S, S24, S26, SF34, SF36, SL34, SL36, 15, 15A, 15B-Bus, 6 Speed Special, AW2, AL3, ALF3, Al, A2, B2-Semi Floating 11/4" x 12         '21-'34: S, S24, S26, SF34, SF36, SL34, SL36, 15, 144, A3, A2, B2-Semi Floating 11/4" x 12         '21-'34: S, S24, S26, SF34, SF36, SL34, SL36, 15, 144, A3, A2, B2-Semi Floating 11/4" x 12         '25-'28: Fast Freight			
Scout F, 2F6, 2FW			
24.34: S21, S22, S23, S27, T2W, T3W, T6W, T7W, T8, T20, T21, T22       1½" x 12         28.30: A6, A6B Bus       1¼" x 7         29.730: 3F6, 3FW       1" x 14         FISHER       1" x 14         29.732: 15 Pass       1" x 14         FCRD       1" x 14         19.30: TT, AA-Separate Brakes       78" x 14         30.33: AA, BB       11¼" x 12         28.738: A, B, 50, 68, 77, 78, 81C, 82C       5%" x 18         FORD OF CANADA       1½" x 12         29.30: 20Y & S11       1" x 14         GENERAL MOTORS (G. M. C.) Axle Shafts       1½" x 12         19-24: K, K16, K20       1½" x 12         27.729: T10, T11       3¼" x 16         27.729: T19, T19 Pontiac Motor       1" x 14         27.2729: T19, T19 Pontiac Motor       1" x 14         24.213: LD, Special Del., AW1       1" 21.34: S, S24, S26, SF34, SF36, SL34, SL36, 15, 15A, 15B-Bus, 6 Special, Del., AW1         21.24: 31: LD, Special Del., AW1       1" 21.34: S, S24, S26, SF36, SF36, SL34, SL36, 15, 15A, 15B-Bus, 6 Special, Del., AW1         21.27: 32: SD34, SD36, SD44, SD46, SF44, SF46, A4, A5       1½" x 12         24.73: SD34, SD36, SD44, SD46, SF44, SF46, A4, A5       1½" x 12         KELLY-SPRINGFIELD       27: KS20 Spec       1½" x 12         KENWORTH & BUS       28: 29: A6 <td< td=""><td>그리고 그렇게 되었다면 그는 이 때문 그들이 되었다면 하는 것이 되었다. 그 그 그 그 그 그 그 그 그 그 그 그 그 그 그 그 그 그 그</td><td>7/8" x 1</td><td><sup>4</sup> 24-27: 33 <math>7_8'' \times 14</math></td></td<>	그리고 그렇게 되었다면 그는 이 때문 그들이 되었다면 하는 것이 되었다. 그 그 그 그 그 그 그 그 그 그 그 그 그 그 그 그 그 그 그	7/8" x 1	<sup>4</sup> 24-27: 33 $7_8'' \times 14$
T7W, T8, T20, T21, T22		,,	'24-'31: LD, Special Del., AW1 1" x 14
'28-'30: A6, A6B Bus       1¼" x 7         '29-'30: 3F6, 3FW       1" x 14         FISHER       1" x 14         '25-'28: Fast Freight       1" x 14         FLEXIBLE BUS       1½" x 12         '29-'30: T7, AA-Separate Brakes       ½" x 14         '19-'30: TT, AA-Separate Brakes       ½" x 14         '28-'33: AA, BB       1¼" x 12         '28-'33: AA, BB       1¼" x 12         '28-'33: AA, BB       1¼" x 12         '30-'33: AA, BB       1¼" x 12         '24-'28: 30 & 30-6       1½" x 12         '29-'30: 20Y & S11       1" x 14         GENERAL MOTORS (G. M. C.) Axle Shafts       1½" x 12         '19-'24: K, K16, K20       1½" x 12         '27-'29: T10, T11       ¾" x 16         '27-'29: T19, T19 Pontiac Motor       1" x 14		11/2" x 1	4
'29-'30: 3F6, 3FW       1" x 14       ALF3, AI, A2, B2-Semi Floating       14" x 12         FISHER       25-'28: Fast Freight       1" x 14       1" x 14         FLEXIBLE BUS       1" x 14       JEEP       (Willys) Universal Model CJ-2A       1" x 14         FORD       29-'30: TT, AA-Separate Brakes       1/8" x 14       KELLY-SPRINGFIELD       '27.' X20 Spec.       1½" x 12         '19-'30: TT, AA-Separate Brakes       1/4" x 12       '26-'28: A, WTW       1" x 14         '30-'33: AA, BB       1/4" x 12       '28-'38: A, B5, 50, 68, 77, 78, 81C, 82C       3/8" x 18         FORD OF CANADA       '30-'33: AA, BB       1/4" x 12         '30-'33: AA, BB       1/4" x 12         '24-'28: 30 & 30-6       1/2" x 12         '29-'30: 20Y & S11       1" x 14         GENERAL MOTORS (G. M. C.) Axle Shafts       1/4" x 12         '19-'24: K, K16, K20       1/4" x 12         '27-'29: T10, T11       3/4" x 16         '27-'29: T19, T19 Pontiac Motor       1" x 14         '30-'32: 53       11/4" x 12         '27-'29: T19, T19 Pontiac Motor       1" x 14			15A, 15B-Bus, 6 Speed Special, AW2, AL3,
FISHER  '25-'28: Fast Freight 1" x 14  FLEXIBLE BUS  '29-'32: 15 Pass. 1½" x 12  FORD  '19-'30: TT, AA-Separate Brakes 7%" x 14  '28-'38: A, B, 50, 68, 77, 78, 81C, 82C 5%" x 18  FORD OF CANADA  '30-'33: AA, BB 1½" x 12  FORD OF CANADA  '30-'33: AA, BB 1½" x 12  GARFORD  '24-'28: 30 & 30-6 1½" x 12  '29-'30: 20Y & S11 1 "x 14  GENERAL MOTORS (G. M. C.) Axle Shafts  '19-'24: K, K16, K20 1½" x 12  '27-'29: T10, T11 3½" x 14  '27-'29: T19, T19 Pontiac Motor 1" x 14  '30-'32: 53 1½" x 16  '27-'29: T19, T19 Pontiac Motor 1" x 14  '30-'32: 53 1½" x 12			ALF5, A1, A2, B2-Semi Floating 11/4" x 12
2528: Fast Freight       1" x 14         FLEXIBLE BUS         2932: 15 Pass.       1½" x 12         KELLY-SPRINGFIELD         2930: TT, AA-Separate Brakes       ½" x 14         3033: AA, BB       1½" x 12         2838: A, B, 50, 68, 77, 78, 81C, 82C       ½" x 18         2628: A, WTW       1" x 14         2830: 45, 55       1½" x 12         2830: 45, 55       1½" x 12         2428: 30 & 30-6       1½" x 12         2930: 20Y & S11       1" x 14         CENERAL MOTORS (G. M. C.) Axle Shafts         1924: K, K16, K20       1½" x 12         2729: T10, T11       ¾" x 16         2729: T10, T11       ¾" x 16         2729: T19, T19 Pontiac Motor       1" x 14         JEPP         (Willys) Universal Model CJ-2A       1" x 14         KELLY-SPRINGFIELD         2828: A, WTW       1" x 14         2829: A6       1½" x 12         2829: A6       1½" x 12         2829: A6       1½" x 12         2930: 207 & S1       1" x 14         KISEEL         2428: 30 & 306       1½" x 12         2428: 30 & 45,			21-32. 3D34, 3D30, 3D44, 3D40, 3F44, 3F40,
Color	- 104,221		
'29-'32: 15 Pass.       1½" x 12       KELLY-SPRINGFIELD         FORD       '27: KS20 Spec.       1½" x 12         '19-'30: TT, AA-Separate Brakes       ½" x 14         '30-'33: AA, BB       1½" x 12         '28-'38: A, B, 50, 68, 77, 78, 81C, 82C       5%" x 18       '28-'29: A6       1½" x 12         FORD OF CANADA       '30-'33: AA, BB       1½" x 12       KING ZEITLER         '24-'28: 30 & 30-6       1½" x 12         '29-'30: 20Y & S11       1" x 14         GENERAL MOTORS (G. M. C.) Axle Shafts         '19-'24: K, K16, K20       1½" x 12         '27-'29: T10, T11       34" x 16         '27-'29: T10, T11       34" x 16         '27-'29: Speed Truck       ½" x 14         '27-'29: T19, T19 Pontiac Motor       1" x 14		IXI	네가지를 잘 됐다. 그는
FORD       '27: KS20 Spec.       1½" x 12         '19-'30: TT, AA-Separate Brakes       %" x 14       KENWORTH & BUS         '30-'33: AA, BB       1½" x 12       '26-'28: A, WTW       1" x 14         '28-'38: A, B, 50, 68, 77, 78, 81C, 82C       5%" x 18       '28-'29: A6       1½" x 12         FORD OF CANADA       '28-'30: 45, 55       1½" x 12         '30-'33: AA, BB       1½" x 12       '28-'30: 45, 55       1½" x 12         '24-'28: 30 & 30-6       1½" x 12       '24-'30: 35, 40       1½" x 12         '29-'30: 20Y & S11       1" x 14       'KISSEL       '24-'28: General, Utility       1½" x 12         'GENERAL MOTORS (G. M. C.) Axle Shafts       ***          '1½" x 12       '24-'30: Heavy Duty       1½" x 12         '27-'29: T10, T11       3¼" x 16       '27-'29: Speed Truck       7½" x 14         '27-'29: T19, T19 Pontiac Motor       1" x 14       '30-'332: 53       1½" x 12		11/" - 1	
'19-'30: TT, AA-Separate Brakes       78" x 14       KENWORTH & BUS         '30-'33: AA, BB       1½" x 12         '28-'38: A, B, 50, 68, 77, 78, 81C, 82C       58" x 18         FORD OF CANADA       '28-'30: 45, 55         '30-'33: AA, BB       1½" x 12         '30-'33: AA, BB       1½" x 12         '24-'28: 30 & 30-6       1½" x 12         '29-'30: 20Y & S11       1" x 14         'GENERAL MOTORS (G. M. C.) Axle Shafts       1½" x 12         '19-'24: K, K16, K20       1½" x 12         '27-'29: T10, T11       34" x 16         '27-'29: T19, T19 Pontiac Motor       1" x 14         '30-'32: 53       1½" x 12         '26-'28: A, WTW       1" x 14         '28-'30: 45, 55       1½" x 12         '28-'30: 45, 55       1½" x 12         '27-'28: 22A       ½" x 12         '24-'30: 35, 40       1½" x 12         '24-'28: General, Utility       1½" x 12         '24-'28: General, Utility       1½" x 12         '24-'30: Heavy Duty       1½" x 12         '27-'29: Speed Truck       ½" x 14         '30-'32: 53       1½" x 12		1 1/8" X 1	
'30-'33: AA, BB       114" x 12       '26-'28: A, WTW       1" x 14         '28-'38: A, B, 50, 68, 77, 78, 81C, 82C       5%" x 18       '28-'29: A6       11½" x 12         FORD OF CANADA       '28-'30: 45, 55       114" x 7         '30-'33: AA, BB       114" x 12       KING ZEITLER         '24-'28: 30 & 30-6       11½" x 12       '24-'30: 35, 40       11½" x 12         '29-'30: 20Y & S11       1" x 14       '24-'28: General, Utility       1½" x 12         GENERAL MOTORS (G. M. C.) Axle Shafts       *KLEIBER       '24-'30: Heavy Duty       1½" x 12         '27-'29: T10, T11       34" x 16       '27-'29: Speed Truck       7%" x 14         '27-'29: T19, T19 Pontiac Motor       1" x 14       '30-'32: 53       114" x 12			
'28-'38: A, B, 50, 68, 77, 78, 81C, 82C       \$\frac{5}{8}" \times 18\$         FORD OF CANADA       '28-'30: 45, 55       \$\frac{11}{4}" \times 7\$         '30-'33: AA, BB       \$\frac{11}{4}" \times 12\$       \$\frac{\text{KING ZEITLER}}{27-'28: 22A}\$       \$\frac{7}{8}" \times 14\$         CARFORD       \$\frac{11}{2}" \times 12\$       \$\frac{24-'30: 35, 40}{24-'30: 35, 40}\$       \$\frac{11}{2}" \times 12\$         '29-'30: 20Y & S11       \$\frac{1}{1}" \times 14\$       \$\text{KISSEL}\$         '29-'24: K, K16, K20       \$\frac{11}{3}" \times 12\$       '24-'28: General, Utility       \$\frac{11}{2}" \times 12\$         '21-'29: T10, T11       \$\frac{3}{4}" \times 16\$       '27-'29: Speed Truck       \$\frac{7}{3}" \times 14\$         '27-'29: T19, T19 Pontiac Motor       \$\frac{1}{1}" \times 14\$       '30-'32: 53       \$\frac{11}{4}" \times 12\$		, 0	
FORD OF CANADA         '30-'33: AA, BB       1½" x 12         GARFORD       24-'28: 30 & 30-6       1½" x 12         '29-'30: 20Y & S11       1" x 14         GENERAL MOTORS (G. M. C.) Axle Shafts       1½" x 12         '19-'24: K, K16, K20       1½" x 12         '27-'29: T10, T11       3¼" x 16         '27-'29: T19, T19 Pontiac Motor       1" x 14         '30-'32: 53       1½" x 12         '28-'30: 45, 55       1¼" x 7         KING ZEITLER       '24-'28: 22A       ½" x 14         '24-'28: General, Utility       1½" x 12         '24-'28: General, Utility       1½" x 12         '24-'30: Heavy Duty       1½" x 12         '27-'29: T10, T11       34" x 16         '27-'29: Speed Truck       ½" x 14         '30-'32: 53       1½" x 12			200 200 4.6
***SOLOGY CANADA**  *30-33: AA, BB		%" x 18	28-30: 45. 55
GARFORD       '24-'28: 22A       '%" x 14         '24-'28: 30 & 30-6       1½" x 12       '24-'30: 35, 40       1½" x 12         '29-'30: 20Y & S11       1" x 14       KISSEL       '24-'28: General, Utility       1½" x 12         GENERAL MOTORS (G. M. C.) Axle Shafts       1½" x 12       '24-'28: General, Utility       1½" x 12         '19-'24: K, K16, K20       1½" x 12       '24-'30: Heavy Duty       1½" x 12         '27-'29: T10, T11       3¼" x 16       '27-'29: Speed Truck       ½" x 14         '27-'29: T19, T19 Pontiac Motor       1" x 14       '30-'32: 53       1¼" x 12			KING ZEIZI ED
CART-ORD         '24-'28: 30 & 30-6       1½" x 12         '29-'30: 20Y & S11       1" x 14         CENERAL MOTORS (G. M. C.) Axle Shafts         '19-'24: K, K16, K20       1½" x 12         '27-'29: T10, T11       34" x 16         '27-'29: T19, T19 Pontiac Motor       1" x 14         '30-'32: 53       1½" x 12         '24-'30: 35, 40       1½" x 12         '24-'30: 35, 40       1½" x 12         '24-'28: General, Utility       1½" x 12         '24-'30: Heavy Duty       1½" x 12         '27-'29: Speed Truck       ½" x 14         '30-'32: 53       1½" x 12		11/4" x 15	
24-26: 50 & 50-6 '29-30: 20Y & S11  CENERAL MOTORS (G. M. C.) Axle Shafts '19-24: K, K16, K20 '27-29: T10, T11 '27-29: T10, T11 '27-29: T19, T19 Pontiac Motor  11/2" x 12 '24-28: General, Utility  11/2" x 12 '24-28: General, Utility  11/2" x 12 '24-30: Heavy Duty '27-29: Speed Truck '27-29: Speed Truck '30-32: 53  11/4" x 12			224-330 · 35 40
'29-'30: 20Y & S11       1" x 14       '24-'28: General, Utility       1½" x 12         GENERAL MOTORS (G. M. C.) Axle Shafts       KLEIBER         '19-'24: K, K16, K20       1½" x 12         '27-'29: T10, T11       ¾" x 16       '24-'30: Heavy Duty       1½" x 12         '27-'29: T19, T19 Pontiac Motor       1" x 14       '30-'32: 53       1¼" x 12	'24-'28: 30 & 30-6	1½" x 15	
GENERAL MOTORS (G. M. C.) Axle Shafts         '19-'24: K, K16, K20       1½" x 12         '27-'29: T10, T11       ¾" x 16         '27-'29: T19, T19 Pontiac Motor       1" x 14         '30-'32: 53       1½" x 12         '30-'32: 53       1½" x 12			I NISSEL
'19-'24: K, K16, K20       1½" x 12       '24-'30: Heavy Duty       1½" x 12         '27-'29: T10, T11       ¾" x 16       '27-'29: Speed Truck       ½" x 14         '27-'29: T19, T19 Pontiac Motor       1" x 14       '30-'32: 53       1½" x 12	GENERAL MOTORS (G. M. C.) Axle Shafts		24-20. General, Utility 1/2 X 12
'27-'29: T10, T11       34" x 16       '27-'29: Speed Truck       3/8" x 14         '27-'29: T19, T19 Pontiac Motor       1" x 14       '30-'32: 53       114" x 12			
'27-'29: T19, T19 Pontiac Motor			
			/0

K-D TOOLS

TR	TIC	K	6	(Cont'd)	
1 10				(UUIL U)	

TRUCKS (Cont'd)				
	Axle Size	1 seconds.	Axle	Size
KREBS		SELDEN-HAHN	HIT	
'24-'28: 44, 45, 46	$1\frac{1}{2}$ x 12	'30-'31: Express	11/4"	x 12
LA FRANCE-REPUBLIC		SELDON		
'29-'30: C1-Clark Rear, Fleetmaster	1" x 14	Unit 20-58" Track & Pacemaker	1"	x 14
'29-'30: F1, FA1	11/4" x 12	24-29: 35, 37, 34, 36, 38	11/4"	x 7
LANCE TRUCK		47 Bus	11/2"	x 6
'24-'29: G	$1\frac{1}{2}'' \times 12$	30C, 33B	$1\frac{1}{2}''$	x 12
LARRAREE & RUS		SERVICE	- "	
'27: A3	$1\frac{1}{4}$ " x 12	'29-'30: 20Y, S11	1"	x 14
'25-'30: A1, A3, 20	1" x 14	STAR	11/11	10
LE MOON		'27-'28: Fleet-truck	11/4"	X 12
'24-'27: GP2	$1\frac{1}{2}$ x 12	STERLING & BUS '24-'27: GB-1	11/"	- 10
'24-'28: GP1½, H15	1" x 14	24-27: GB-1	1/2	X 12
'28-'29: H10	$\frac{7}{8}$ " x 14	25-27: DW8	1	X 14
LUEDINGHAUS		STEWART	1"	- 1/
27-28: C	/8" x 14	'26-'30: 16, 16X—above No. 161,005	11/"	x 19
'27-'28: W	$1\frac{1}{2}'' \times 12$	'26-'28: Buddy 21	11/8	X 12
MACCAR	22/11 20	'28-'30: 17, 17X, 24, 24X, 28X, 29X	1 1/4	X I
'23-'24: V1, V2, V3	$1\frac{1}{2}$ x 12	27-34: Buddy 21X, 30, 30A, 40XA, 42X-Semi	11/11	14
'28-'29: 36	$1\frac{1}{4}$ " x 12	Floating	11/4"	X 12
MACK & BUS	21/11 10	STOUGHTON	1//	
'26-'32: 8AC, AB, AC, AK, AP—Chain Drive .	$1\frac{1}{4}$ " x 12	25-28: C, J	1	x 14
MASTER	11/// 10	STUDEBAKER '28-'29: 52B Erskine	3/11	- 14
*24-*28: 21, 22	$1\frac{1}{2}$ x 12	28-29: 52B Erskine	74	x 16
MENOMINEE	1" - 14	'27-'31: GN, GI, GP, S1-114" W. B	/8	x 14
'25-'29: Hurryton	. 1 X 14	'28-'31: 75 Jr., 76, 77, 88, Ser. F-K-N-P, S20,	11/11	14
MORELAND & BUS	11/// 19	S30-First Type	11/4	X 12
25-28: BX, EX		'25-'40: H, GD, GK, GN, 30, 40-146" W. B.,		400
NEW ENGLAND (Netco) '26-'27: A	11/// 19	GK, K5, L5	1"	x 14
	. 1½ X 12	TERRAPLANE		
NOBLE	11/// 19	'34-'37: Utility Comm., Sedan Del., Comm.		0.
'28-'29: 146A	. 1½ X 12	Cab, Cab Pick-Up, 61, 70 Commercial	1/4	x 20
PATRIOT	11/// 19	TWIN COACH	11/"	w 16
25-27: 30, 35	. 1½ X 12	'30-'35: 15, 19	1/4	X 14
'28-'29: 20-B-6	. % X 14	<b>UNITED</b> '25-'30: 16C6, 20C6, 25, 30, 30C6	1"	v 1
PLYMOUTH	2/11 16		1	A I
'39-'40: PT81, PT105	. % x 10	U. S. '26-'30: N	11/."	v '
RAINIER	11/// 10	27-29: 20, 21	11/2"	x 1
25: R-36	$1\frac{1}{2}$ x 12	VICTOR	1 72	A 1.
REHBERGER	.1/# 10	'25-'29:	1"	x 1
°25-°28: A	$1\frac{1}{2}$ " x 12	WACHUSETTS	-	
REO & BUS		'25-'29: J	11/9"	x 15
'25-'32: G Truck, W Bus, FC, FD, FH, FA, FB		WILLITE & DIIS		
FE, FF-with Dual Wheels and using 2-ton		'29-'31: 15B, 57	1"	x 1
axle, FCX, FDX, FHX	. 11/4" x 12	'33-'34: 212, 612, 612K, 613, 613B, after 173741	11/2"	x 1
'27-'29: FA, FB, FE, FF-204 to 636	$1\frac{1}{8}$ " x 12	WILLYS		
27-35: BA, Speedwagon Junior, DA, DC, DF	,	'31-'32: C-113	7/8"	x 1
15A Junior, S4P	. 1" x 14	'30-'31: C-101	1"	x 1
REPUBLIC		WILLYS, KNICHT & WHIPPET		
27-30: 50, 80, 88, 76, 51, 52	$1\frac{1}{4}$ " x 12	'27-'30: T100, T101, 96A, 98A	7/8"	x 1
RUCRY (Durant)		27-30: 15, 16, 20, 21	11/4"	x 1
'28-'29: 54, T, Fast Mail	. 5/8" x 18	'29-'31: C101, T103	1"	x 1
'29-'31: 614	$3/4'' \times 16$	WITT-WILL		
'28-'31: L, X, Fleet Truck, 406, 615, 401	. 11/4" x 12	'26-'30: NN, P	11/2"	x 1
RUGGLES		WORLD		
25-28: 22, 18	. 1" x 14	'28-'29: D8	11/2"	x
SANFORD		VELLOW CAR		
27-28: W6-20	. 1½" x 12	'24'27: T1, T2, T3	7/8"	x 1
CEACDAVE		VELLOW COACH		
24-28: BF, BT	. 1½" x 12	Mod. X & Y	11/4"	x 1
	7			

#### K-D BRITE-STEEL WASHERS



K-D TOOLS



K-D BRITE-STEEL WASHERS are made of highest quality steel available and conform strictly to S.A.E. and U.S. Standard sizes from ½" to 1" inclusive, as specified on Page 27. They are cut flat and clean and the holes are always centered. Packed in attractive 1 lb. boxes, in 5 lb. boxes or in bulk. When ordering, specify bolt sizes and packaging desired.

SEE SIZES AND ASSORTMENTS NEXT PAGE

